

ROLLABOUT PACKAGE

PCS-5100 **PCS-5100P**

ROLLABOUT PROCESSOR

PCS-P500 **PCS-P500P**

DUAL MONITOR BOARD

PCS-G500 **PCS-G500P**

DUAL MONITOR BOARD

PCS-G510 **PCS-G510P**

V.35 BOARD

PCS-I500

X.21 BOARD

PCS-I510

RS-449 BOARD

PCS-I520

I-MUX BOARD

PCS-I530

SERVICE MANUAL

1st Edition

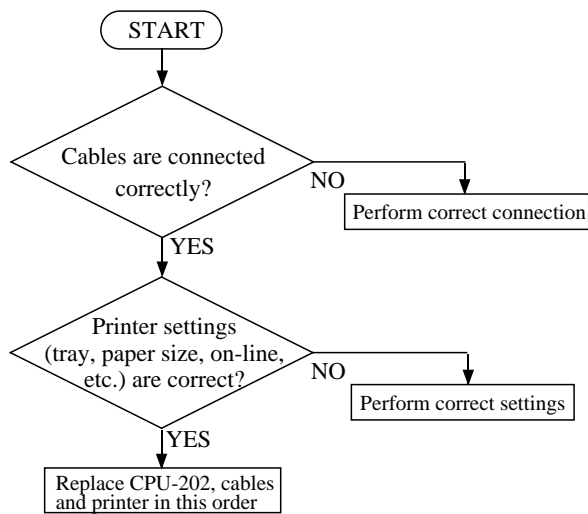
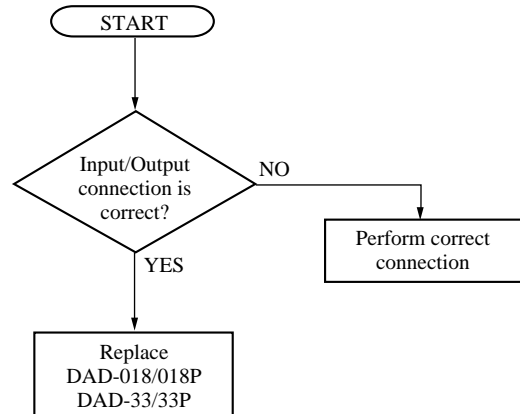
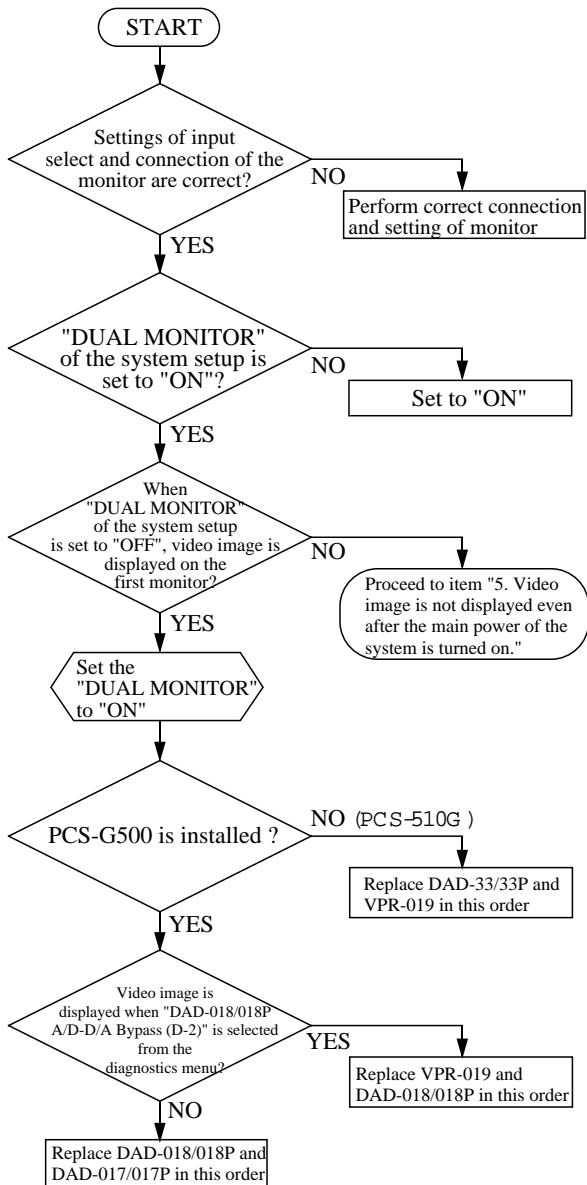
SUPPLEMENT-1

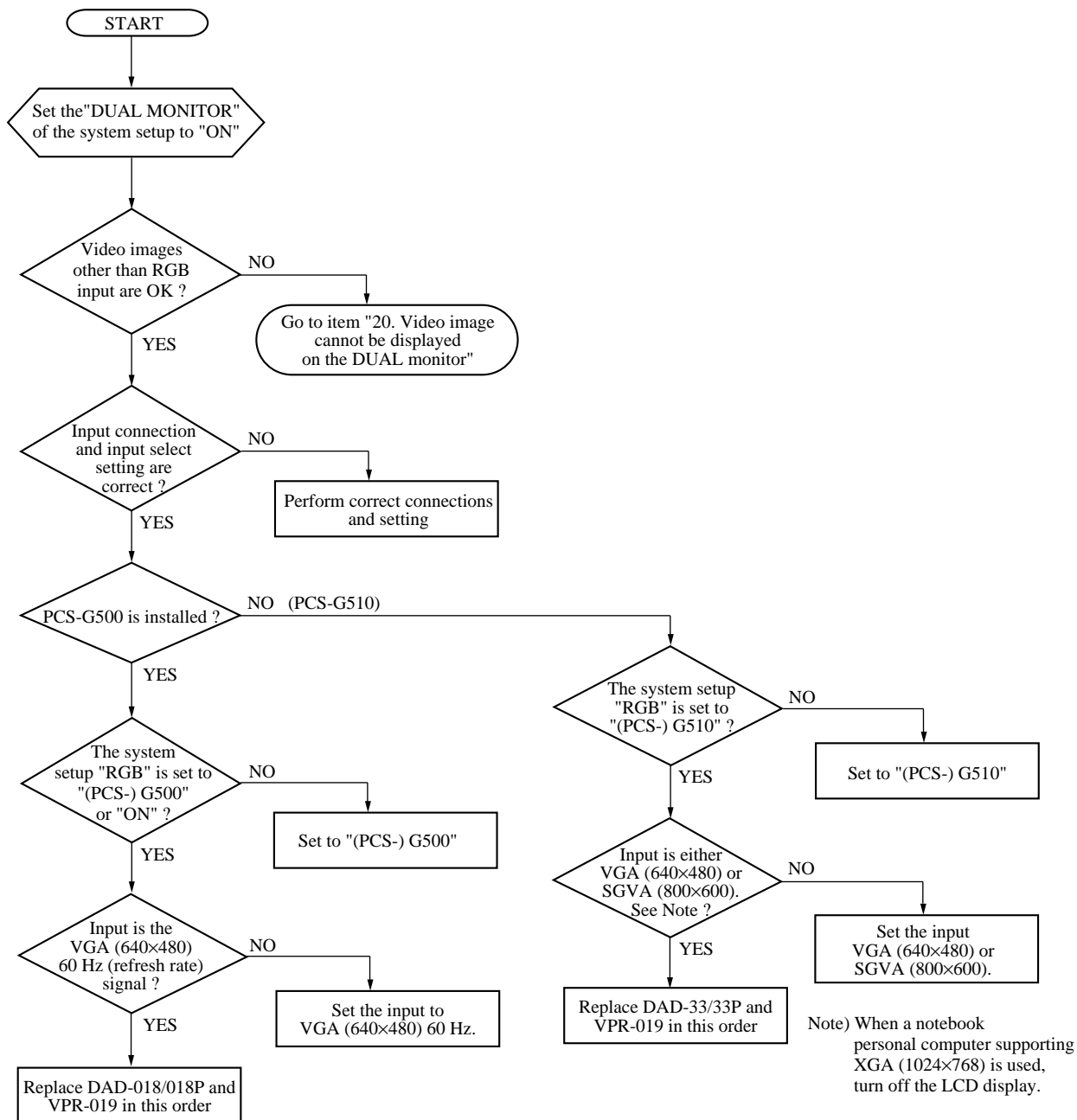
Please add or replace the following manual with this
SUPPLEMENT-1.

1. PCS-5000/5000P SYSTEM SERVICE MANUAL 1st Edition
Part number : 9-977-634-01
2. PCS-P500/P500P SERVICE MANUAL Volume 1 1st Edition
Part number : 9-977-640-11
3. PCS-P500/P500P SERVICE MANUAL Volume 2 1st Edition
Part number : 9-977-640-21
4. PCS-5100/5100P SERVICE MANUAL 1st Edition
Part number : 9-955-121-01

SUBJECT

1. PCS-5000/5000P SYSTEM SERVICE MANUAL
SECTION 3. TROUBLESHOOTING
(Pages 3-23 and 3-24)
SECTION 4. PCS-5100/5100P SYSTEM CIRCUIT
(Pages 4-1 through 4-4)
2. PCS-P500/P500P SERVICE MANUAL Volume 1 and
PCS-5100/5100P SERVICE MANUAL
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(Pages 2-10 and 2-10-1)
SECTION 3. CIRCUIT DESCRIPTIONS AND
TROUBLESHOOTING
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19. Cannot print.**21. The picture of the RGB MONITOR OUT cannot be displayed.****20. Video image cannot be displayed on the DUAL monitor.**

22. The RGB IN picture cannot be displayed on video monitor.

SECTION 4

(PCS-5100/5100P-E) 3

OUTLINE OF PCS-5100/5100P SYSTEM OPERATION AND BLOCK DIAGRAMS**4-1. OUTLINE OF PCS-5100/5100P SYSTEM OPERATION**

The PCS-5100/5100P system consists of the rollabout processor, camera unit, audio unit and remote commander. The operations of the main circuit boards used in the rollabout processor, camera unit and audio unit are outlined below. Refer to the separate service manual of the respective equipment for more details.

4-1-1. Rollabout Processor**1. CPU-202 board**

The CPU-202 board controls the entire rollabout processor. It performs various controls such as interrupt, DMA, memory control and power management in STANDBY mode. It is equipped with a bus line to control other circuit boards.

The CPU-202 board has four RS-232C ports for an external interface, which is used to send and receive commands to and from the camera unit, receive signals from the drawing tablet, send signals for VID control, send and receive user data, and send and receive the port for external control commands.

The CPU-202 board has Centronix interface for the printer port, and the PCMCIA interface for the PC card control. Because this board controls the other circuit boards via the bus line, it is difficult to repair the system if an error occurs in this board.

2. IF-540/540P board

The IF-540/540P board performs the communication control with the ISDN line. The board controls calling of the other terminal. When a call is established, a send signal is output from the VPR-019 board and the received signal is input to the VPR-019 board. If the block becomes defective, the ISDN line cannot be connected.

3. VPR-019 board

The operation of the VPR-019 board mainly depends on a Vision Compression Processor chips, and has the following functions:

- a) Sends and receives data to and from the IF-540/540P or IF-541/542/543 board connected to the line. Also has an H.221 function, which multiplexes and demultiplexes the video and audio signals.
- b) Converts the signals (Y, B-Y and R-Y) input from the DAD-017/017P board to the intermediate format called CIF, codes motion pictures using the H.261 system, and decodes motion pictures using the H.261 so that the Y, U and V signals are output to the DAD-017/017P board.

- c) Codes the signal input from the DAD-017/017P or DAD-018/018P/DAD-33/33P board in JPEG. Codes the data read from the scanner in MMR. The display signal is output to the DAD-017/017P or DAD-018/018P/DAD-33/33P boards.
- d) A LAP-B function, which packs the data into packets so that JPEG and MMR data are sent and received.
- e) Audio signal interface with the APR-011 board. The audio signal is multiplexed and demultiplexed by the H.221 function.
- f) Some external interface S are equipped; the SCSI port to which the scanner is connected, receiving the SIRCS input signal from the camera unit, and IR output for monitor control.

If the VPR-019 board becomes defective, the major functions such as video image display and communication are disabled.

4. DAD-017/017P board

The DAD-017/017P board processes the video signal input and output with the external equipment and controls the display of the menu screens. The DAD-017/017P board receives three Y/C system inputs (including camera unit) and one composite input. The DAD-017/017P board provides one Y/C and composite output respectively.

- a) Regarding the input signals, from three Y/C input signals and one Y/C separated output from the composite signal, one signal is selected for motion pictures and still pictures in single monitor mode, and two signals are selected in dual monitor mode. The selected signal is passed through the decoder and A/D converter. The signals are sent to the VPR-019 board as the digital Y, U and V signals.
- b) Regarding the output signals, the menu display is controlled by the bus signal supplied from the CPU-202 board. The menu data adds the signal input from the VPR-019 board to constitute a set of digital Y, U and V signals, which is passed through the encoder and D/A converter. The passed signal is supplied to external devices in two forms: as an analog Y/C signal and as a composite signal.

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5. APR-011 board

The APR-011 board performs two kinds of audio signal processing: the echo canceling and the audio coding. The coding systems of G.711, G.722 and G.728 are supported.

- a) The microphone audio signal, which is input from the audio unit, is A/D converted, processed by the echo canceller, then sent to the codec block. The coded data is sent to the VPR-019 board.
- b) The coded audio data, which is received from the other (remote) terminal via the VPR-019 board, is decoded by the codec block, sent to the echo canceller, D/A converted and sent to the audio unit as the output signal to the speaker.

6. DAD-018/018P board (PCS-G500/G500P)

The DAD-018/018P board supports dual monitor specifications and one channel of RGB input. It also has one channel of Y/C output, which is exclusively for still pictures or the self-picture display. The signal which is selected independently from the motion picture on the DAD-017/017P board, or the VGA signal (the horizontal sync frequency is 31.47 KHz and the resolution is 640 dots × 480 lines or 640 dots × 400 lines) which is input to DAD-018/018P board, is A/D converted for the still picture and output to the VPR-019 board. The output signal of either still picture or the self-picture from the VPR-019 board, is encoded, D/A converted and output to external equipment as an analog Y/C signal.

7. IF-541/IF-542/IF-543 board (PCS-I510/PCS-I500/PCS-I520)

One of these boards is installed according to the leased line. The send signal supplied from the VPR-019 is converted to the signal having the electrical characteristics suited for each leased line. The received signal from each leased line is sent to the VPR-019 board.

8. IF-583 board (PCS-I530)

The IF-583 board is installed on the IF-540/540P board and performs the B1 BONDING function. The demultiplexed signals supplied from the ISDN lines through the IF-540/540P board are multiplexed into a signal of one line, which is then sent to the VPR-019 board. The signal from the VPR-019 board is demultiplexed to the respective ISDN lines.

9. Power supply unit

Electrical power is supplied to the rollabout processor, camera unit, audio unit and drawing tablet all from this power supply unit. The power switch, AC inlet and AC outlet (AC outlet is equipped only for PCS-P500/P500P) are unified into this unit. When the power switch on the front panel of the rollabout processor is turned on, power is supplied to the entire unit. When the system initialization is completed, the system enters power down mode, in which +5 V only is supplied; this is actually the STANDBY state. When the input signal from the remote commander or from the SYSTEM ON switch of the audio unit is sensed, the startup signal is output to the power supply unit and all power supplies are turned on.

10. DAD-33/33P board (PCS-G510/G510P)

The DAD-33/33P board supports dual monitor specifications and video input from personal computer. It has one channel respectively of Y/C output of still picture or self-picture display, RGB input and RGB through output.

The still picture or the self-picture that is output from the VPR-019 board, is encoded and D/A converted by this board and is sent to external equipment as the analog YC signal. At the same time, this board A/D-converts and down-converts the input signals such as video signal from personal computer, the VGA (640×480) signal and the SVGA (800×600) signal, into the same format as the other video signals, and are sent to the VPR-019 board.

(PCS-5000 and PCS-5100/1 are not supported.)

4-1-2. Camera Unit

Circuit Board Configuration

MT-112P board : Pan motor
 MT-112T board : Tilt motor
 SE-271P board : Pan pulse sensor
 SE-271T board : Tilt pulse sensor
 SE-273P1 board : Pan position sensor
 SE-273T1 board : Tilt position sensor
 SE-274P2 board : Pan position sensor
 SE-274T2 board : Tilt position sensor
 SY-218 board : System controller

The camera unit receives the commands from the processor (PCS-P500/P500P) and controls the focus and zoom of the camera block. It also controls the camera pan and tilt head.

The SY-218 board is the main controller of the camera unit. The commands which are supplied from the processor (PCS-P500/P500P) through the RS-232C are decoded in the SY-218 board. If the decoded signal is a command for the camera block control, the zoom/focus control signals are sent to the camera block as a LANC signal. If the decoded signal is a command for the pan and tilt head, the pan and tilt motors are operated.

The limits of vertical movements and horizontal movements are sensed by the sensors on the SE-273T1 and SE-274T2 boards in the vertical (tilt) direction, and on the SE-273P1 and SE-274P2 boards in the horizontal (pan) direction.

In addition, the camera unit has a preset function in which up to six pan and tilt head and zoom positions can be stored in memory and recalled at any time. The number of pulses which are output from the SE-271P and SE-271T boards are counted by the SY-218 board, and memorized as the pan and tilt position data. The preset function is also executed by the commands supplied from the processor (PCS-P500/P500P).

4-1-3. Audio Unit

1. MA-70 board

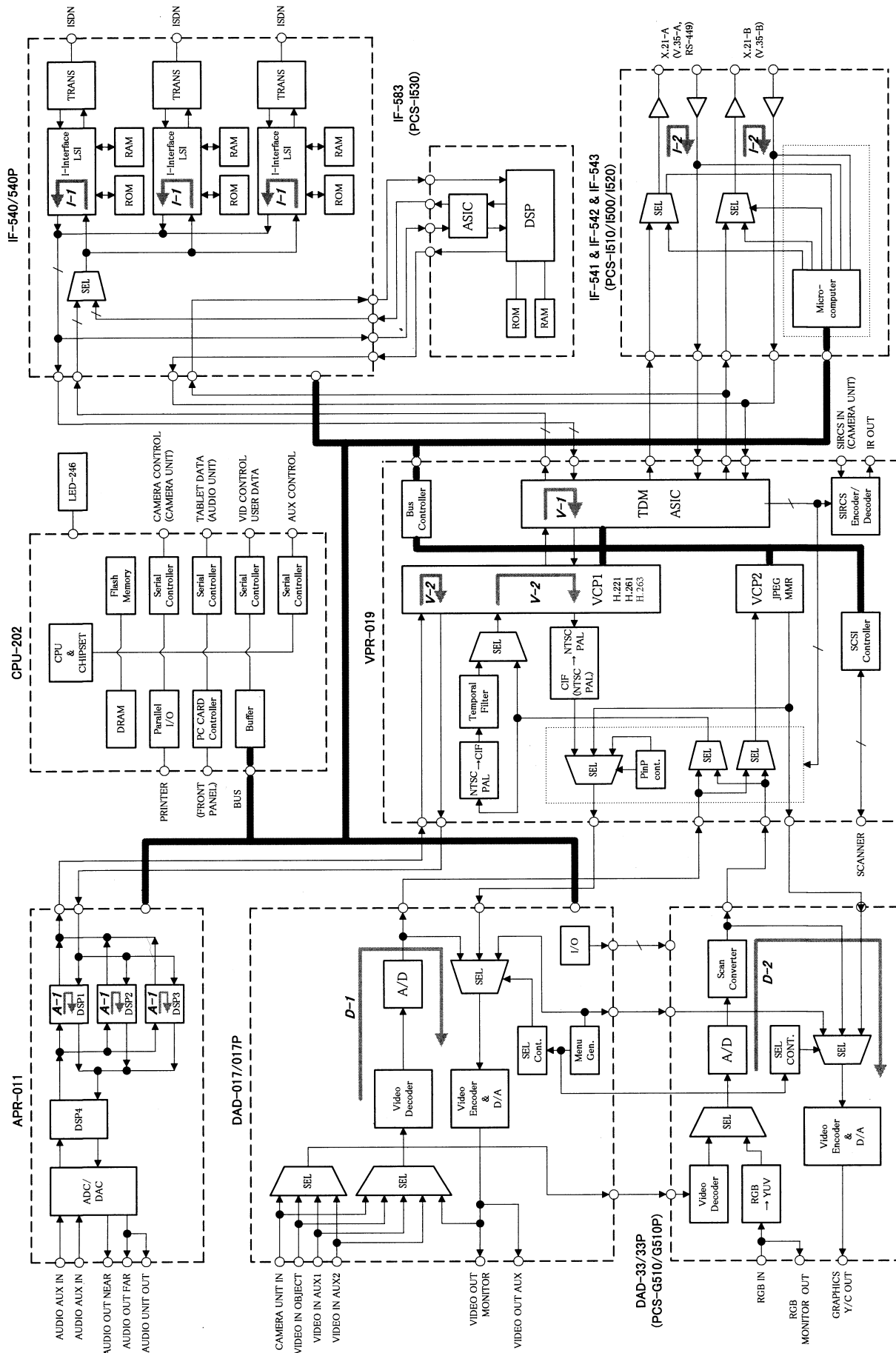
- The analog signal process is performed in the audio unit, which cancels the direct sound from the speaker unit (in the audio unit) using the two microphone units. The equalizer circuit is used so that the input voice of microphone is transmitted clearly to the listeners.
- The main unit (PCS-A500) receives the audio signal from the sub unit with the balanced-type circuit, where common noise is canceled, and as many audio signals as the number of units are synthesized and output to the processor (PCS-P500/P500P) in the balanced-type signal.
- The sub unit (PCS-A510) has the same circuit as the main unit except that the balanced input circuit and the synthesizer circuit are not installed.

2. AA-84 board

The AA-84 board receives the input signal from the processor with the balanced-type circuit, converts the signal from the balanced-type to the unbalanced-type, and uses the 3-band equalizer to obtain the best acoustic characteristics. The BTL amplifier is used in the output stage to drive the speaker.

3. CN-1214 and LED-244 boards.

The CN-1214 board has connectors for connecting external equipments, diodes for protecting the internal circuit from static electricity, and the LED control circuit which is exclusively in the main unit. The LED-244 board is installed only in the main unit. The "POWER" and "STANDBY" LEDs, and the processor system on switch are installed in the board.



PCS-P500/P500P Block Diagram

Volume 1

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Describes in SECTION 1. OPERATING INSTRUCTION of the PCS-5000/5000P System Service Manual.

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SECTION 6 SCHEMATIC DIAGRAMS AND BOARD LAYOUTS

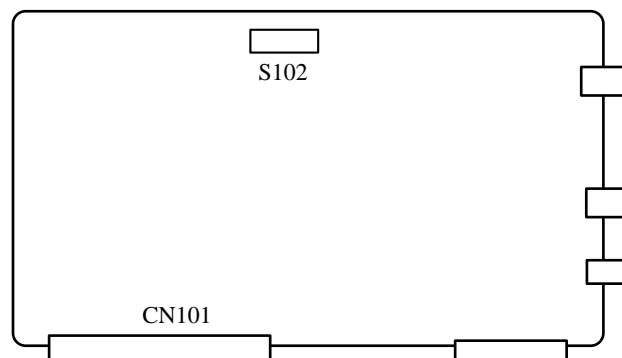
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4. APR-011 board

Be sure to operate the following switches before turning on the main power because the following switches are referred to only when the POWER switch is turned on. All the menu operations to the echo canceller mode from the display are invalid when this switch is set in the mode II or III position except the setting when shipped from the factory.

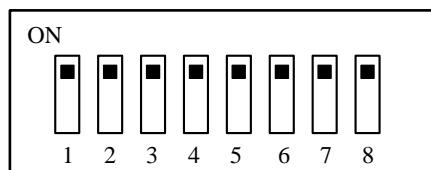


I. Audio Unit In-Use Mode

(Internal echo canceller is set in the single VCR mode: Factory setting mode)

This mode presumes that the audio unit is used. When AUX or AUX + MIC is selected as the audio input, the NEAR and the FAR audio output are muted. The mute is performed to prevent occurrence of howling due to a loop that is formed inside the VCR between the audio input and output.

S102: Mode setting switch



(Set the switches S102-1 to S102-8 to ON)

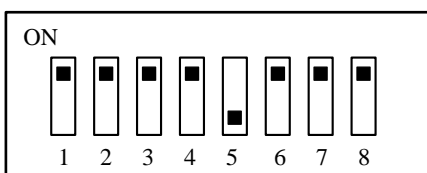
(Factory default position)

II. Audio Unit Not-Used Mode

(Internal echo canceller is set in the dual VCR mode)

This mode presumes that the audio unit is not used. When AUX or AUX + MIC is selected as the audio input, the NEAR and the FAR audio output are not muted. This mode is suited when you want to use the optional microphone and speaker that are connected to the audio unit terminal and the FAR audio output. This mode is also suited to perform the simultaneous recording of the externally connected multiple VCRs and the simultaneous playback. Do not use this mode when the AUX input of a VCR is connected to either one or to both of the NEAR and FAR audio output.

S102: Mode setting switch



(Set the switches S102-1 to S102-4 to ON. Set the switch S102-5 to OFF. Set the switches S102-6 to S102-8 to ON.)

10 (PCS-5100/5100P-E)

III. External Echo Canceller Mode

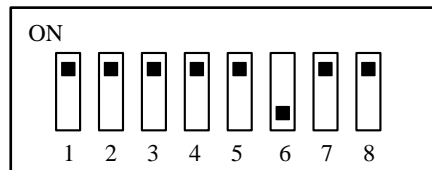
This mode disables the internal echo cancellor, but the volume control and the microphone mute control can be used.

The AUX audio input signal is sent to the audio encoder input.

The FAR audio output signal is input from the audio decoder.

In addition, because the FAR audio output signal is sent to the audio unit speaker, the audio unit must be installed in a location that is as far as possible from the microphone that is connected to the external echo cancellor.

S102: Mode setting switch



(Set the switches S102-1 to S102-5 to ON. Set the switch S102-6 to OFF. Set the switches S102-7 and S102-8 to ON.)

5. VPR-019 board

S001 : NORMAL / BYPASS switch

UC : S/N 23001 through 23140

CE : S/N 53100 through 53180

NORM : During normal operation

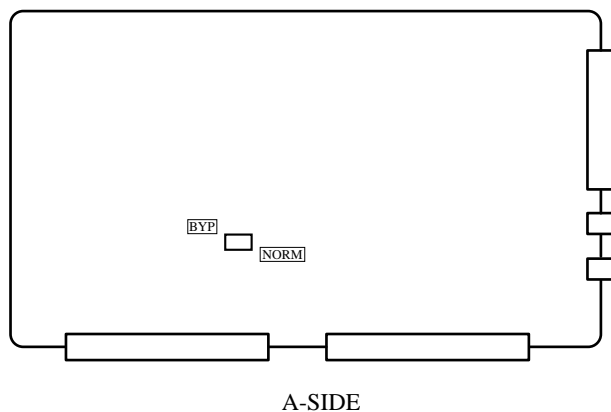
Factory default position

BYP : 1st-VCP

BYP
(ON)



NORM
(OFF)



3-3. OUTLINE OF APR-011 BOARD OPERATION

The APR-011 board circuit processes the audio signal of the PCS-P500/P500P.

The APR-011 board send and receives the audio code and code mode to and from the VPR-019 board. The APR-011 board also controls operation and monitors status of the DSPs and peripheral circuit.

The APR-011 board has three encoders, three decoders and one echo canceller.

The APR-011 board is divided into the following groups when viewed from its function.

1. Audio Codec 1 (audio codec block)

Outline of function :

This is a point-to-point codec with one encoder and one decoder (G.711, G.722 and G.728). In case of the point-to-point connection mode, it codec the transmitting signal from this station and sends it to the VPR-019 board, while the received signal from the other terminal is picked up from the VPR-019 board, decoded and sent to the echo canceller.

In case of the multi-point connection mode, it codec the transmitting signal from this station and sends it to the VPR-019 board, while the received signal from one of the other terminal is picked up from the VPR-019 board, decoded and sent to the echo canceller, being multiplexed with signals from the other audio codec (s).

In addition to the codec, several signal processing have been implemented; DTMF generator, sampling rate converter and others.

Main part :

DSP#1 (IC210) : Codec processor

2. Audio Codec 2 (multi-point connection codec block)

Outline of function :

This codec is used only in case of the multi-point connection. In case of the multi-point connection, this codec works in the same as Audio Codec 1.

If IC230 is not on the APR-011 board, IC220 works as both Audio Codec 2 and 3 (in this case, IC220 is 1-chip "Dual-Codec").

Main part :

DSP#2 (IC220) : Codec processor

3. Audio Codec 3 (point-to-point codec block)

Outline of function :

This is also a point-to-point codec which is used only in case of the multi-point connection, the same as Audio Codec 2.

Main part :

DSP#2 (IC220) : Codec processor (if IC230 is not on the APR-011 board)

DSP#4 (IC230) : Codec processor (if IC230 does be on the APR-011 board)

4. Echo Cancellation (acoustic echo canceling block)

Outline of function :

Acoustic echo is removed from the microphone input signal, then adds or selects the input signal from the AUDIO IN (AUX) as requested by user. The transmitting signal is thus formulated and sent to the point-to-point codec (s).

In case of the multi-point connection mode, the decoded signals from the codecs are then mixed in this block, and if necessary, auto speech detection is performed for selecting the station where a speech is made. And the transmitting signals are distributed into each codec (encoder) respectively.

The audio delay for the lip synchronization with video is inserted to transimttng signal as required.

Main parts :

DSP#3 (IC320) : Echo canceller

SRAM (IC321, 322, 323) : External memory for DSP#3 data processing

5. AD/DA Conversion (analog/digital conversion block)

Outline of function:

This is the analog/digital signal converter, which is placed between the analog process block and the acoustic echo process block.

2 channels (microphone and AUDIO IN AUX) of A/D conversion

2 channels (speaker and AUDIO OUT (FAR) common, and AUDIO OUT (NEAR)) of D/A conversion

Main part :

ADC/DAC (IC4) : AD/DA converter

6. CPU Interface (CPU interface block)

Outline of function :

This is the 8-bit parallel bus interface between the CU-202 board and other circuit boards.

The CPU interface block has the function of downloading, self-diagnostics, DSPs operation control, DSP status monitor and analog mute for the DSPs and their peripheral circuit.

Main parts :

PLD#1 (IC110) : Address decoder

Transceiver (IC103 and 202) : Data bus and transceiver

D-type flip flop (IC111) : Received data transfer

7. Timing Generation (serial signal timing generation block)

Outline of function :

Generation of the timing signals such as clock and sync to be used for sending and receiving the serial signals between the AD/DA, DSPs and connector CN2.

Main parts :

PLD#2 (IC310) : Timing generator

PLL (IC300) : Reference signal (8.192 MHz) generator

8. Analog Circuit (analog process block)

Outline of function :

This circuit performs interface between the MIC/LINE level and the ADC/DAC level.

Analog mute is performed by the control of the CPU interface block.

Main parts :

Op-amp (IC407) : Gain amplifier for transmitting signal

Op-amp (IC409) : Gain amplifier for receiving signal

CPU output mute (Q401, 402, 403 and 404) : Mute circuit for all outputs

AUX output mute (Q403 and 404) : Mute circuit for the auxiliary outputs

9. Power Management (analog power supply monitoring circuit)

Output of function :

This circuit monitors the analog power supply voltage and controls the output of the analog power supply/digital power supply interface device using the sleep signal.

In addition, this controls the output of the crystal oscillator for DSPs (IC210, 220 and 230) clock.

Main part :

Power Manager (IC405) : Analog power supply monitoring

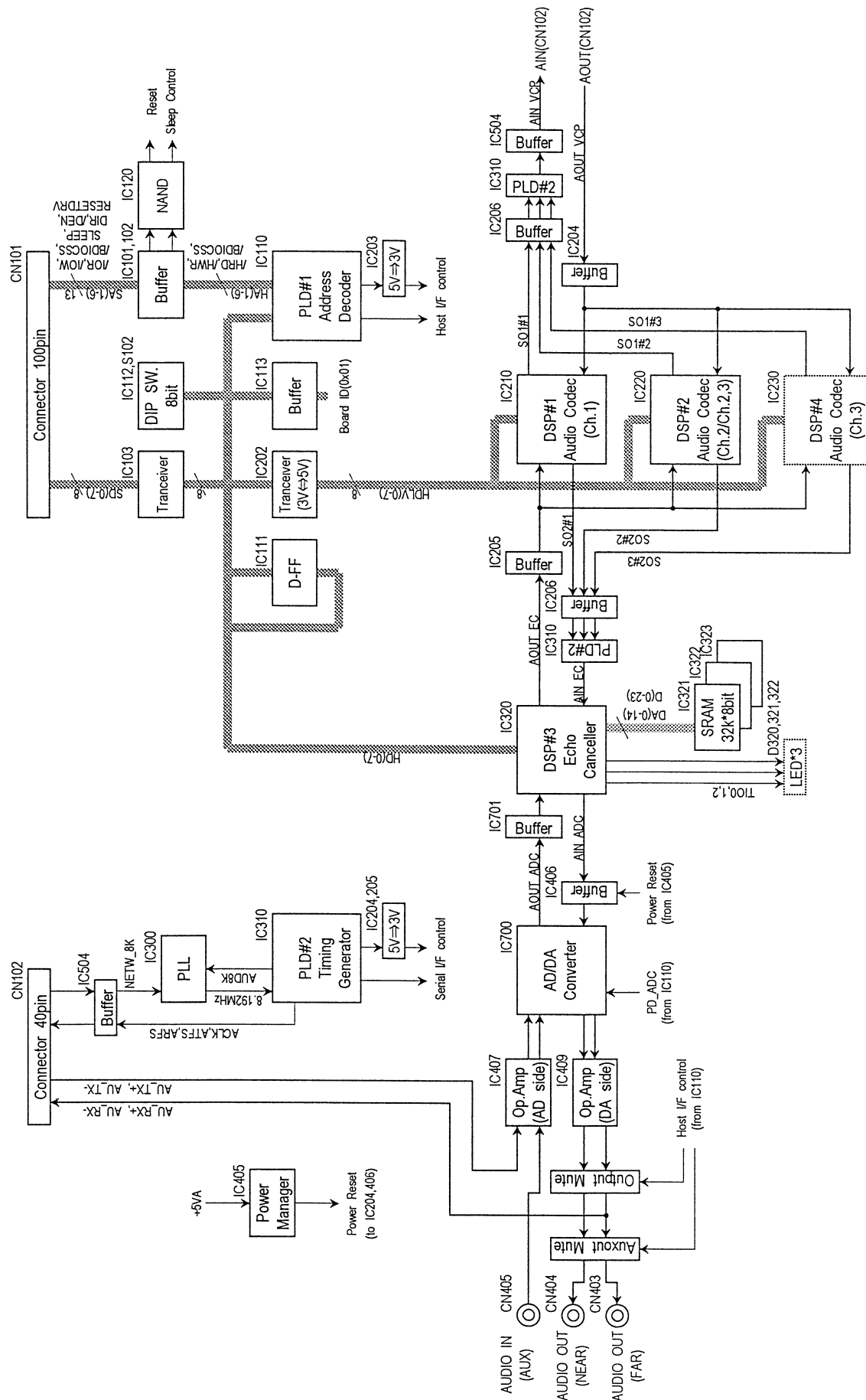


Fig. 3-3-1 APR-011 Board Block Diagram

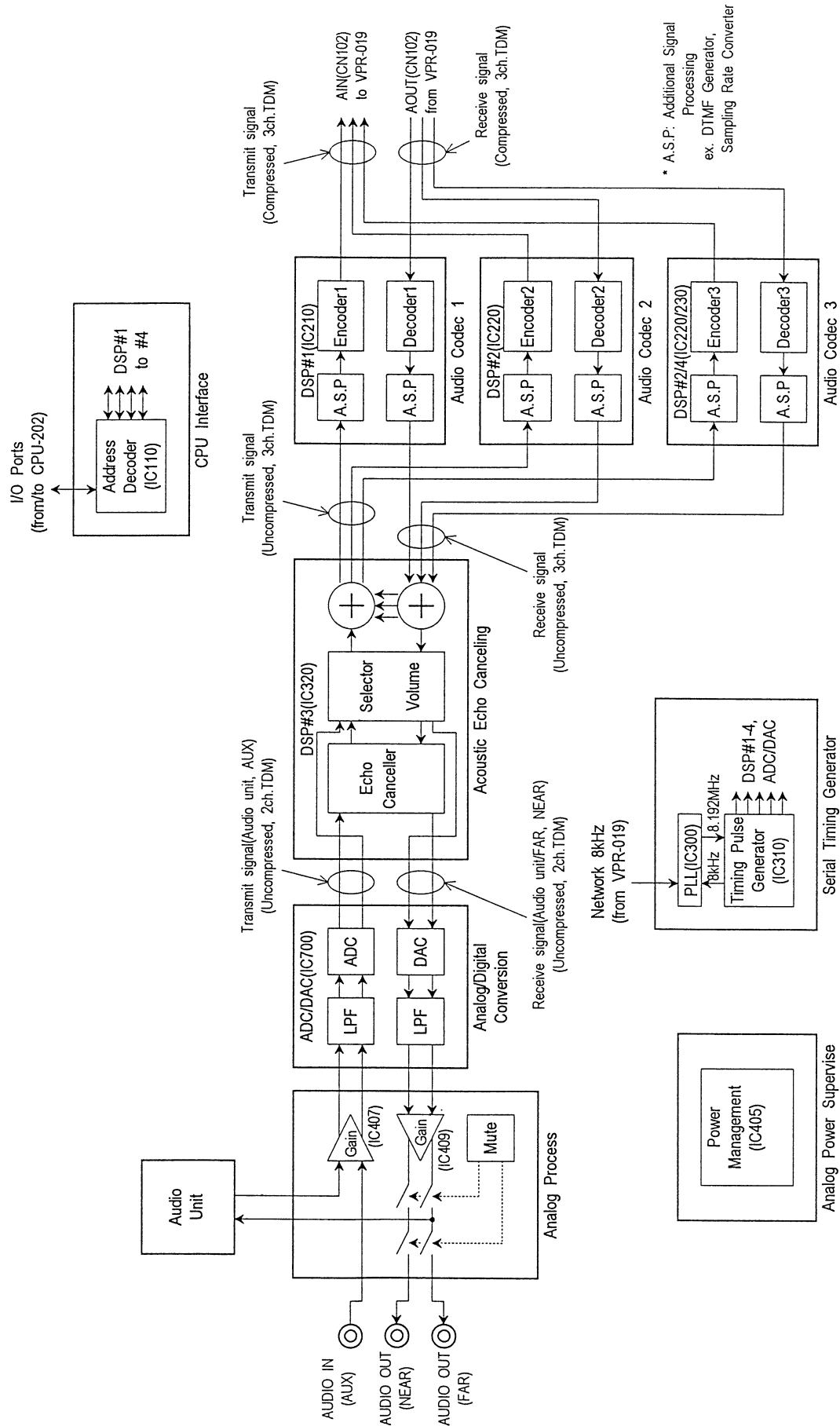


Fig. 3-3-2 APR-011 Board Signal Flow

3-4. APR-011 BOARD TROUBLESHOOTING

When an error occurs in the APR-011 board, use the flow chart as shown to locate the cause of trouble.

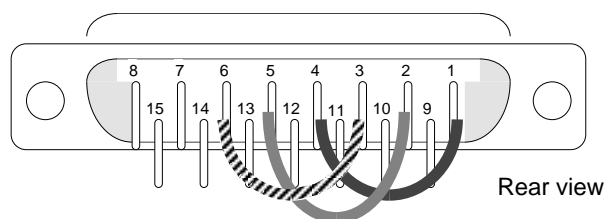
[Equipment required]

- PCS-5100/5100P system
 - （ Rollabout processor (PCS-P500/P500P)
 - Camera unit (PCS-C300/C300P)
 - Audio unit (PCS-A500/A510)
 - Remote commander (PCS-R500)
- Oscilloscope
- Video monitor
- Camera unit connection cable (supplied accessory)
- Audio unit connection cable (supplied accessory)

[Service tools]

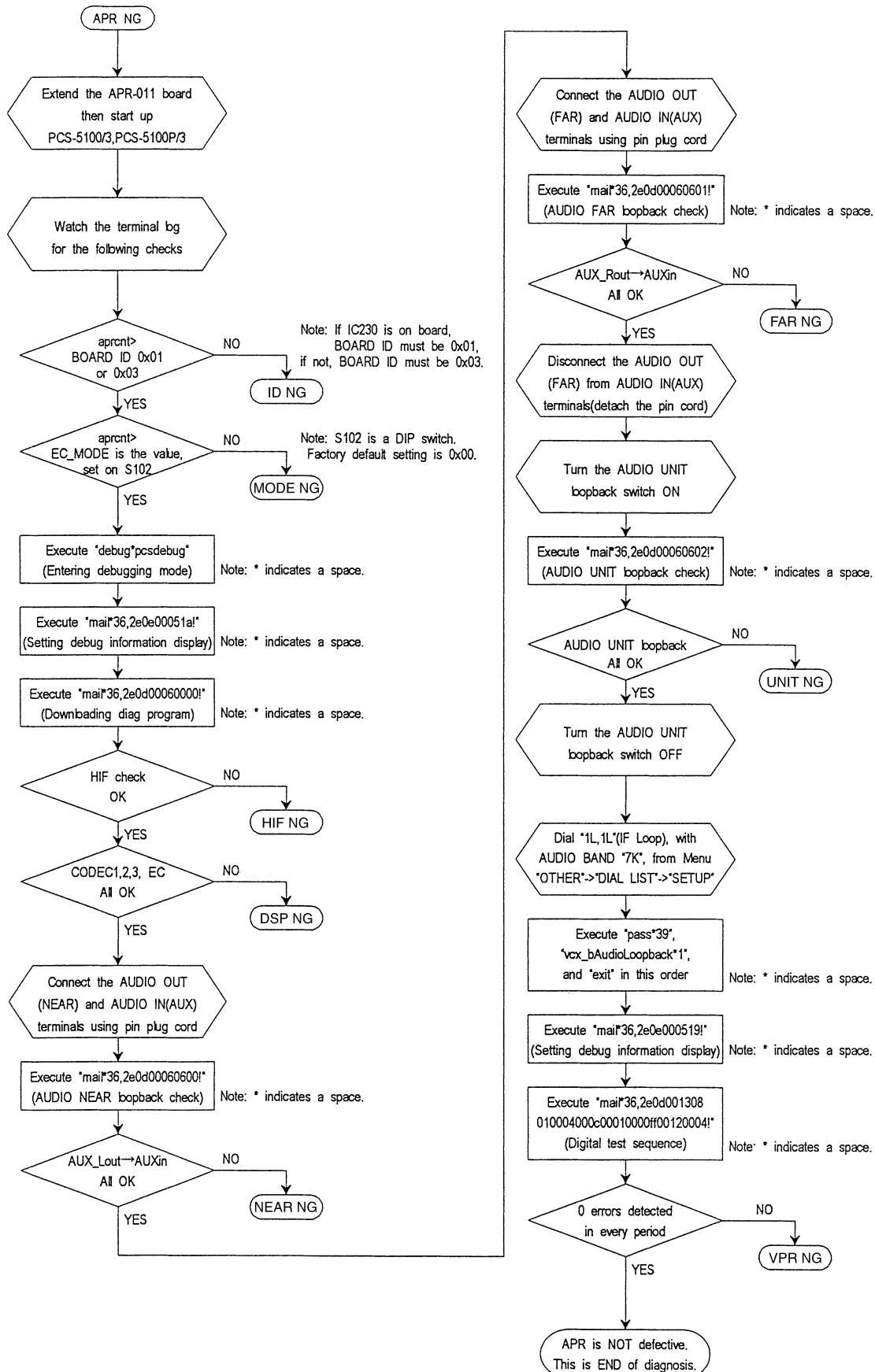
- VH-951 extension board (Sony part number: J-6389-510-A)
- RS-232C terminal (PC/AT compatible machine with communication software “CCT”)
- RS-232C cross cable
- Pin plug cord
- S cable
- Loop connector (as shown below): for Loop back

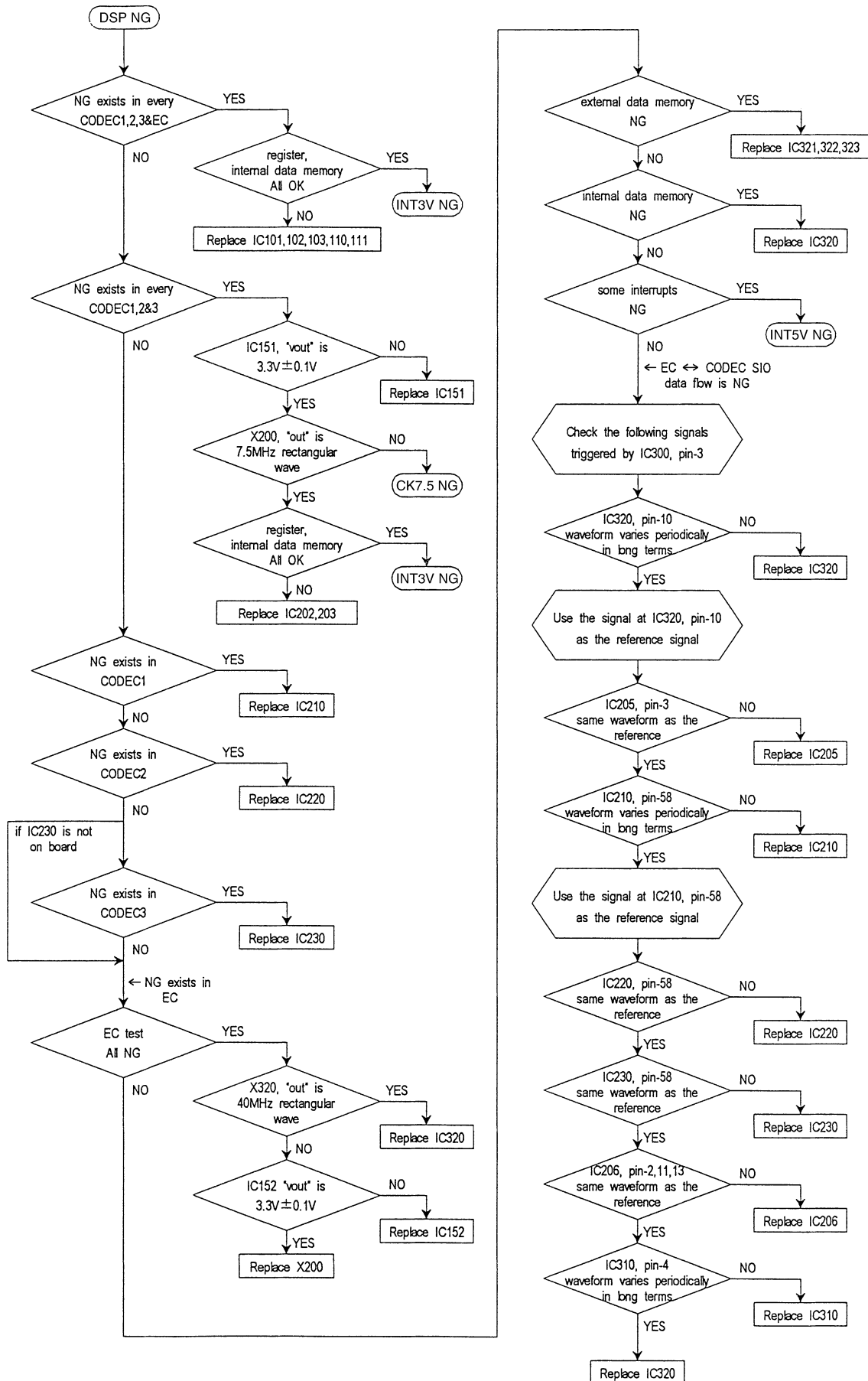
D-sub 15-pin plug (1-764-123-12)
Connect 1 and 4 pins, 2 and 5 pins, and 3 and 6 pins respectively using jumpers and soldering connection.

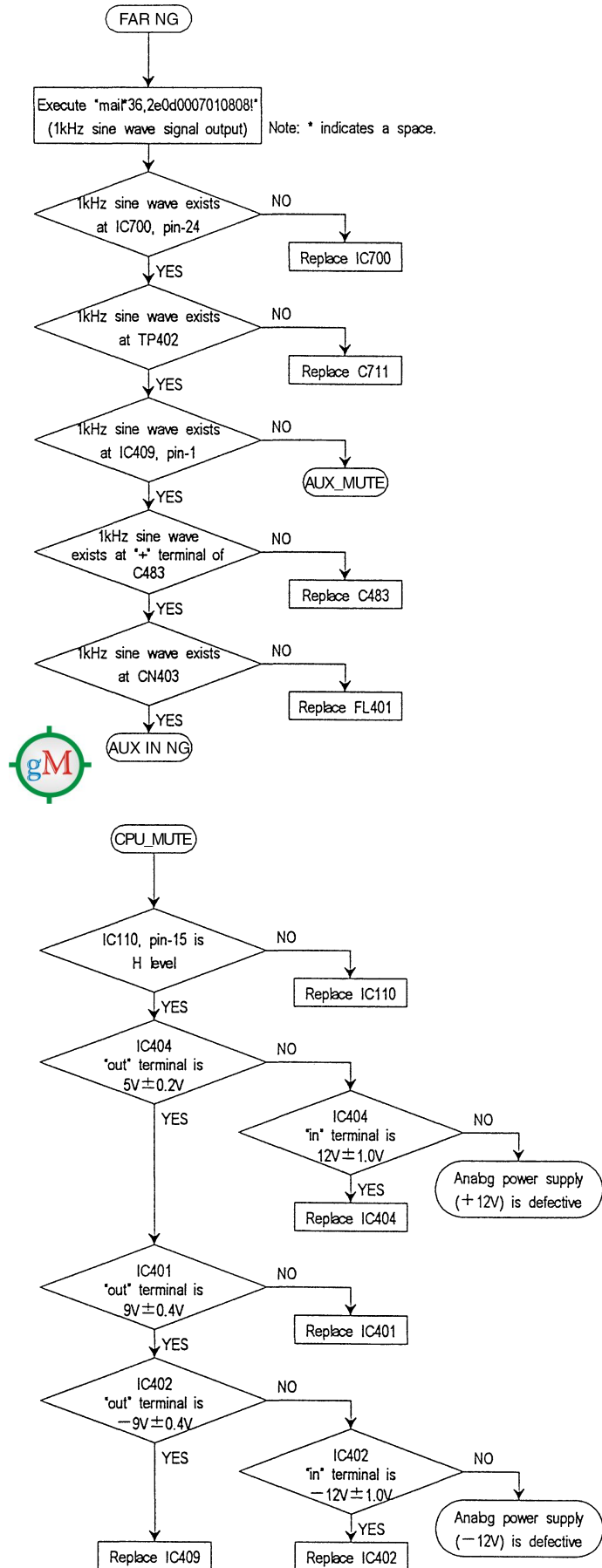
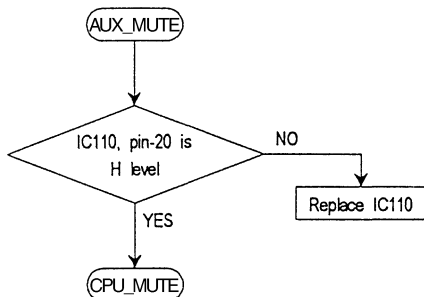
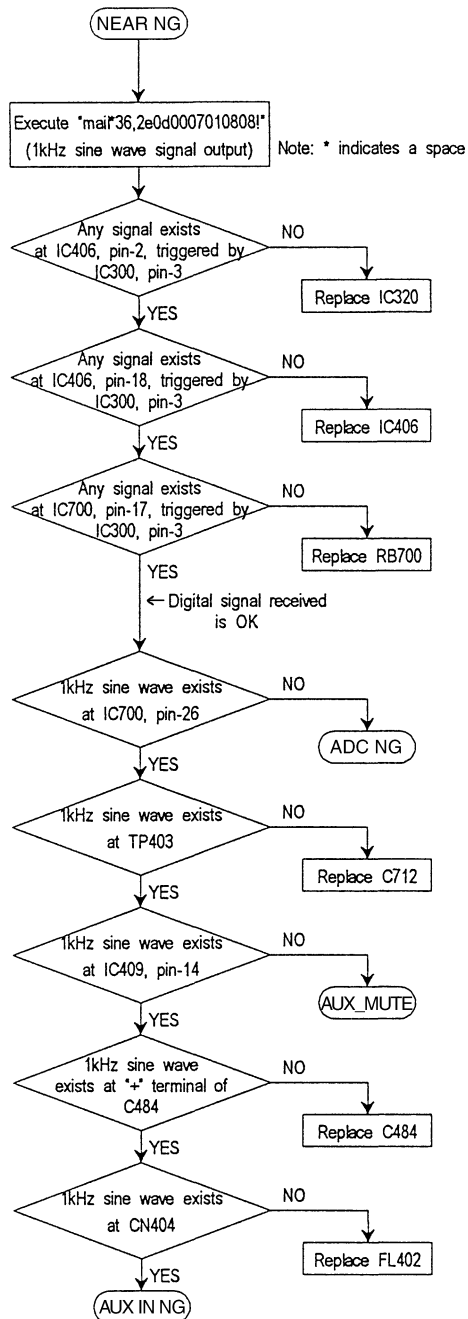


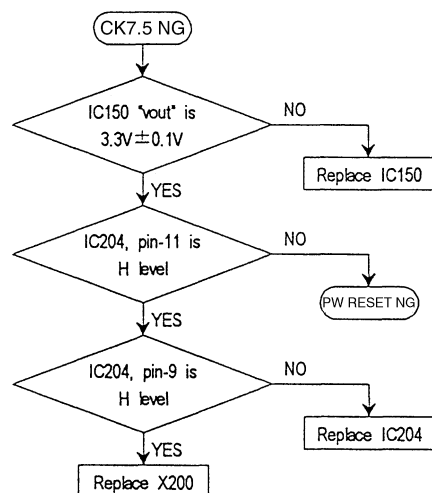
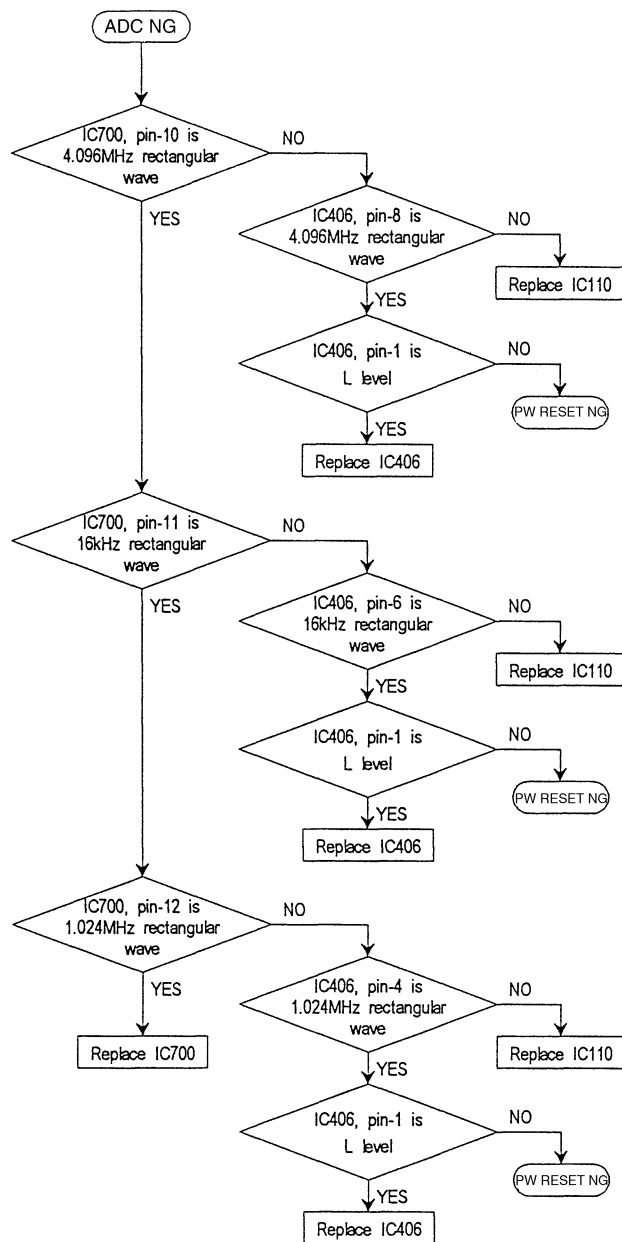
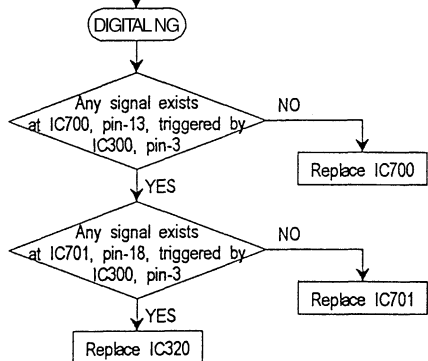
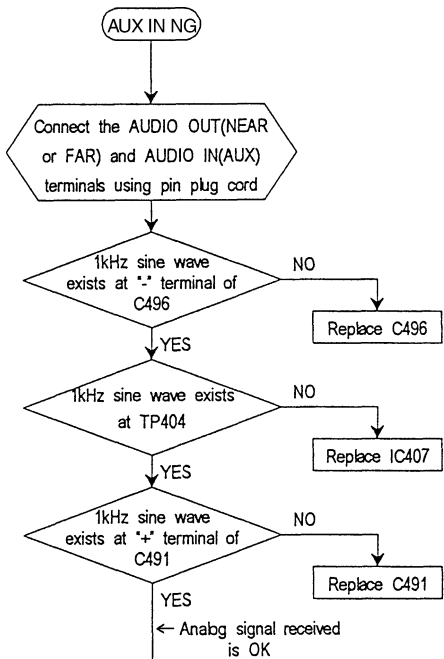
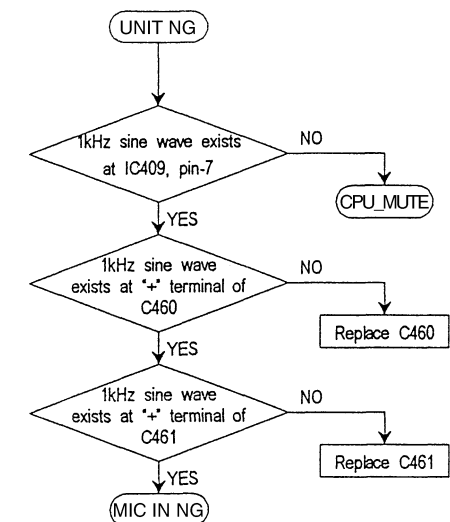
[Preparation]

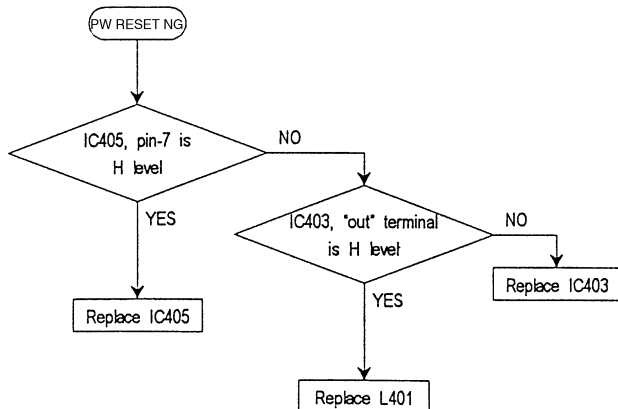
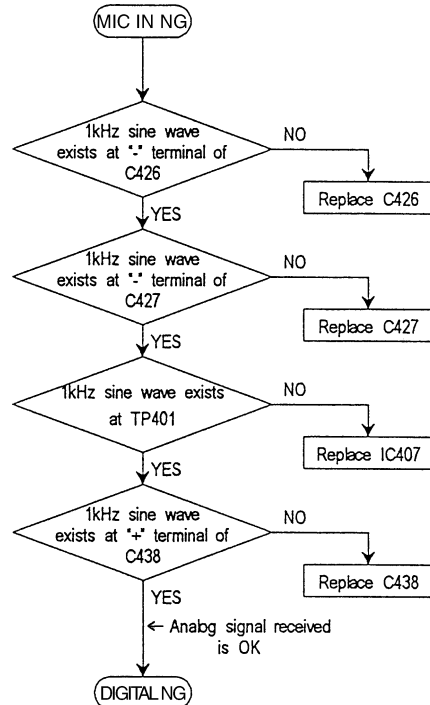
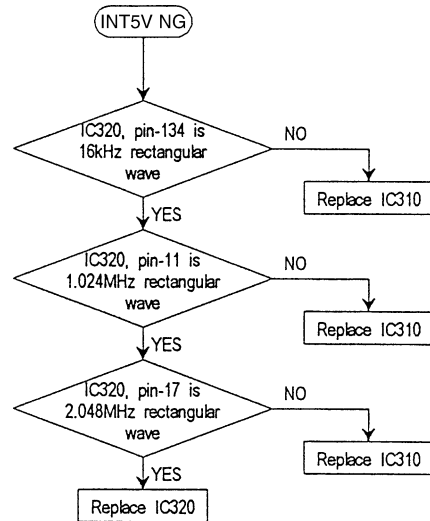
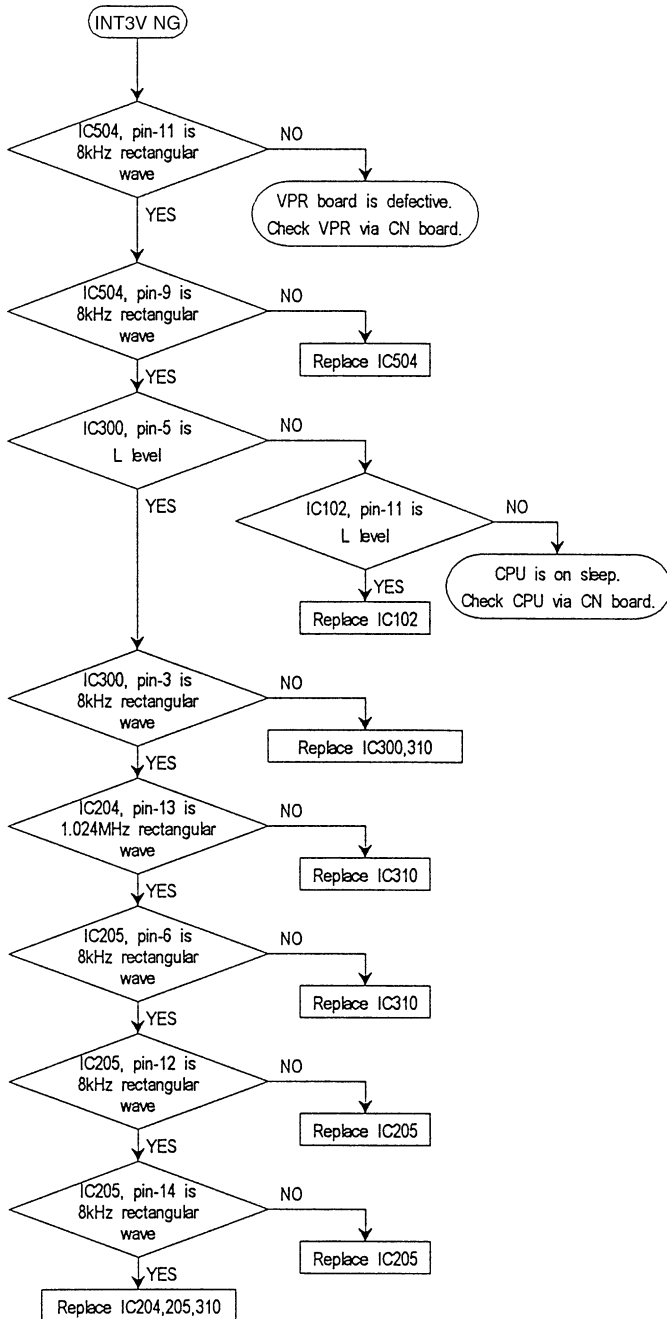
- 1) Set up the PCS-5100/5100P system to the normal operating condition.
- 2) Insert the extension board to the slot of the APR-011 board.
- 3) Insert the APR-011 board to the extension board.
- 4) Connect the RS-232C terminal (to be abbreviated simply as terminal hereafter) to the AUX CONTROL terminal of the rollabout processor (PCS-P500/P500P).
- 5) Start up the communication software “CCT” which is installed in the terminal. Turn on the main power of the PCS-5100/5100P system (enter the debug mode).
- 6) Turn on the main power from the remote commander (PCS-R500).



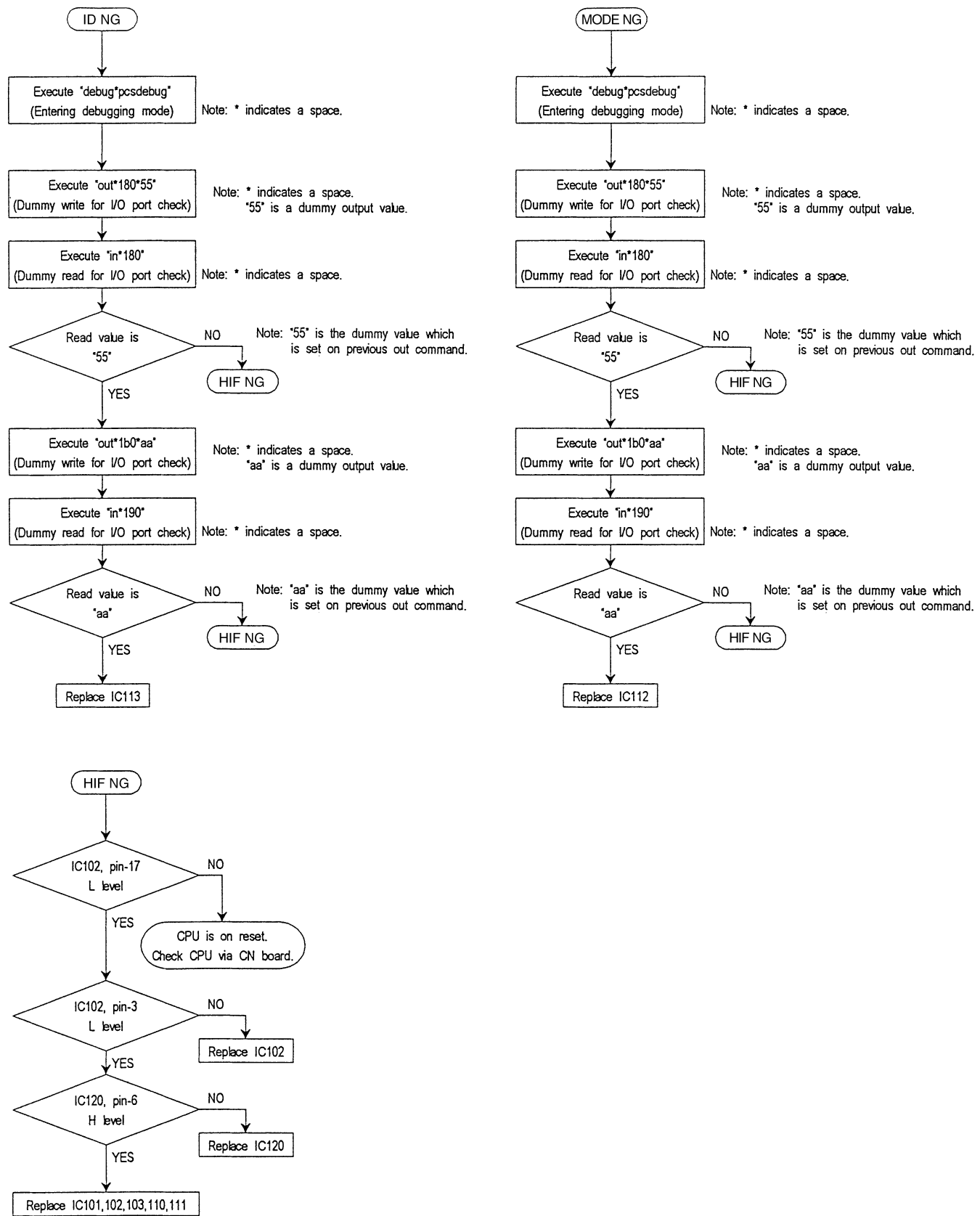


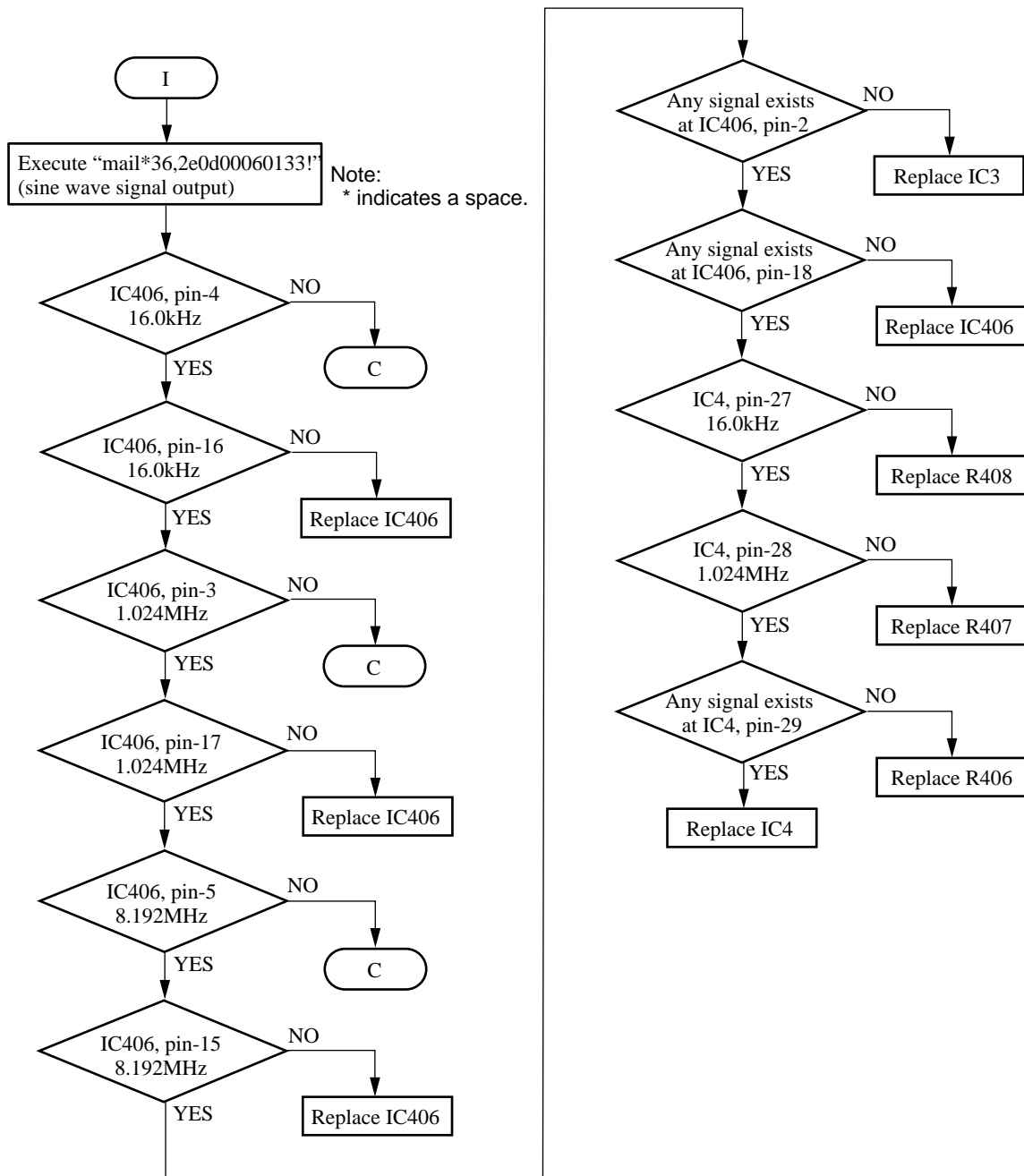












3-5. OUTLINE OF VPR-019 BOARD OPERATION

3-5-1. Function of VPR-019 in the PCS-P500/P500P

The PCS-P500/P500P performs the following operations using the CPU-202, IF-540/540P (IF-541/542/543, to be abbreviated simply as IF-54X hereafter), VPR-019, DAD-017/017P (DAD-018/018P/DAD-33/33P) and APR-011 boards: A/D and D/A conversions of video and audio signal, compression and decompression of motion picture (H.261), audio (G.711, G.722, G.728), still picture (JPEG) and document data (MMR), multiplexing and demultiplexing of various data (H.221), interface and control of communication line, acoustic echo canceling and system control.

The VPR-019 board has the functions of compression and decompression of motion picture, still picture and document data, and multiplexing and demultiplexing of data. In addition to them, the VPR-019 board is equipped with the functions of interfacing with document scanner, receiving the SIRCS signal from remote commander and decoding, encoding and sending the SIRCS signal to the IR-OUT.

Function blocks inside the VPR-019 board and connection with other boards are shown in Fig. 3-5-1.

As shown in Fig. 3-5-1, the video data input from the DAD-017/017P or DAD-018/018P/DAD-33/33P boards is compressed and coded by the motion picture compression block, and sent to the data multiplexing block. The compressed data output from the demultiplexing block is decompressed and decoded, and is output to the DAD-017/017P board. The still picture and document compression and decompression block performs compression and coding of the video signal input from either the DAD-017/017P board or DAD-018/018P/DAD-33/33P boards, and the document data (which is sent from VPR-019 board to the CPU-202 board for once and received from the CPU-202 board through bus) input from the scanner interface, and send the compressed data to the data multiplexing block via bus. The still picture and document compression and decompression block also performs decompression and decoding of the compressed data output from the demultiplexing block, and outputs the data to the DAD-017/017P board or to the DAD-018/018P board. (The data output for printer is sent to the CPU-202 board via bus.) The data multiplexing and demultiplexing block multiplexes the coded data of motion picture, still picture and document, the coded audio data which is input from the APR-011 board, and the user's data which is input from the CPU-202 board via bus. The multiplexed data is output to the IF-540/540P board or to the IF-54X board. The data multiplexing and demultiplexing block also demultiplexes the input data from the IF-540/540P board or from the IF-54X board. The multiplexed data is output to the decompression circuit of the APR-011 board, the CPU-202 board and each video block of the VPR-019 board. The scanner interface block performs control of the document scanner and inputting the scanner data. The SIRCS interface block performs decoding of the remote commander signal which is input from the infra red receiver of the PCS-C300/C300P, and generation of the remote control signal which is output to the IR-OUT terminal.

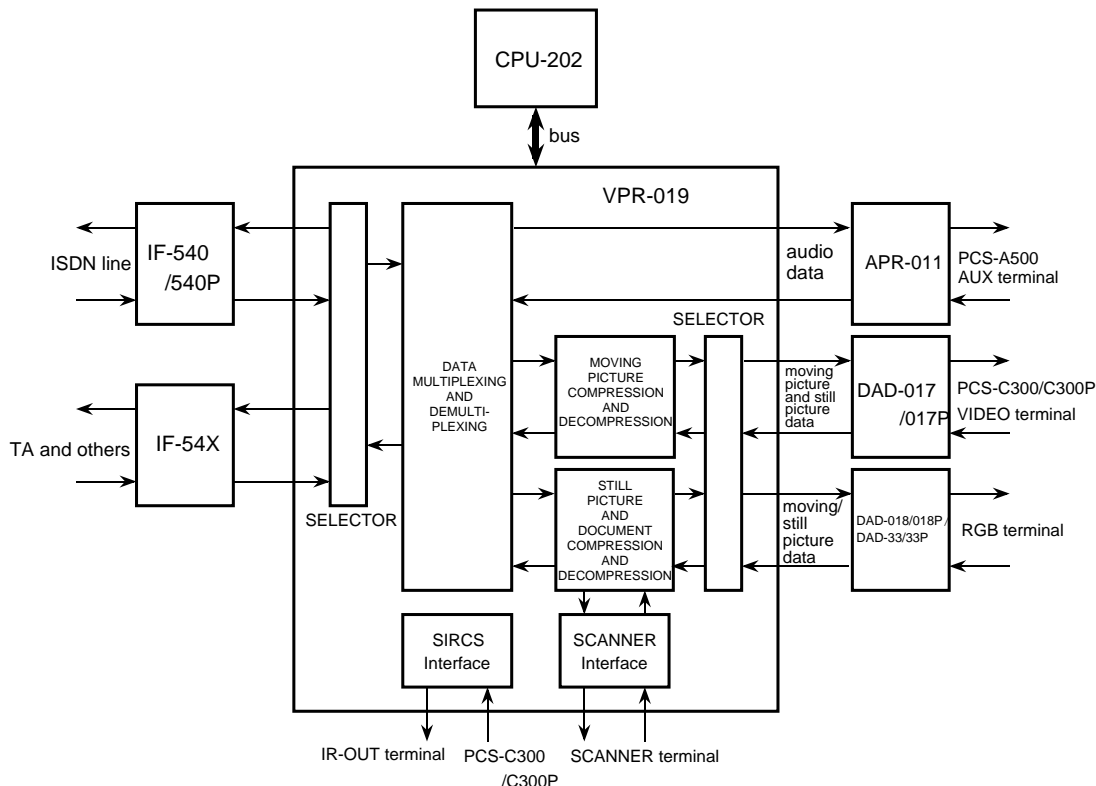


Fig. 3-5-1 VPR-019 Board Function Blocks and Connection with Other Boards

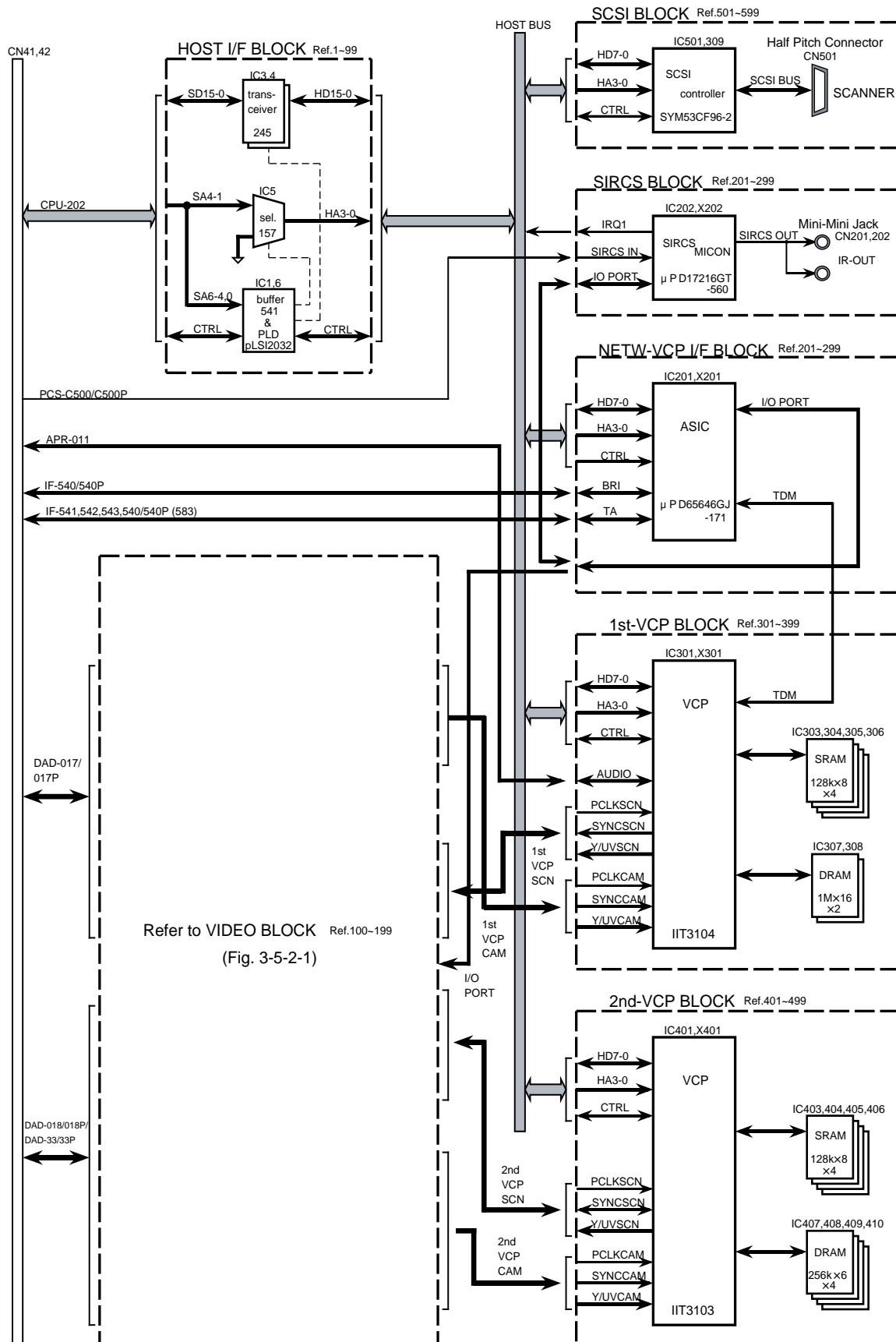


Fig. 3-5-2 VPR-019 Board Block Diagram

VIDEO BLOCK Ref.100-199

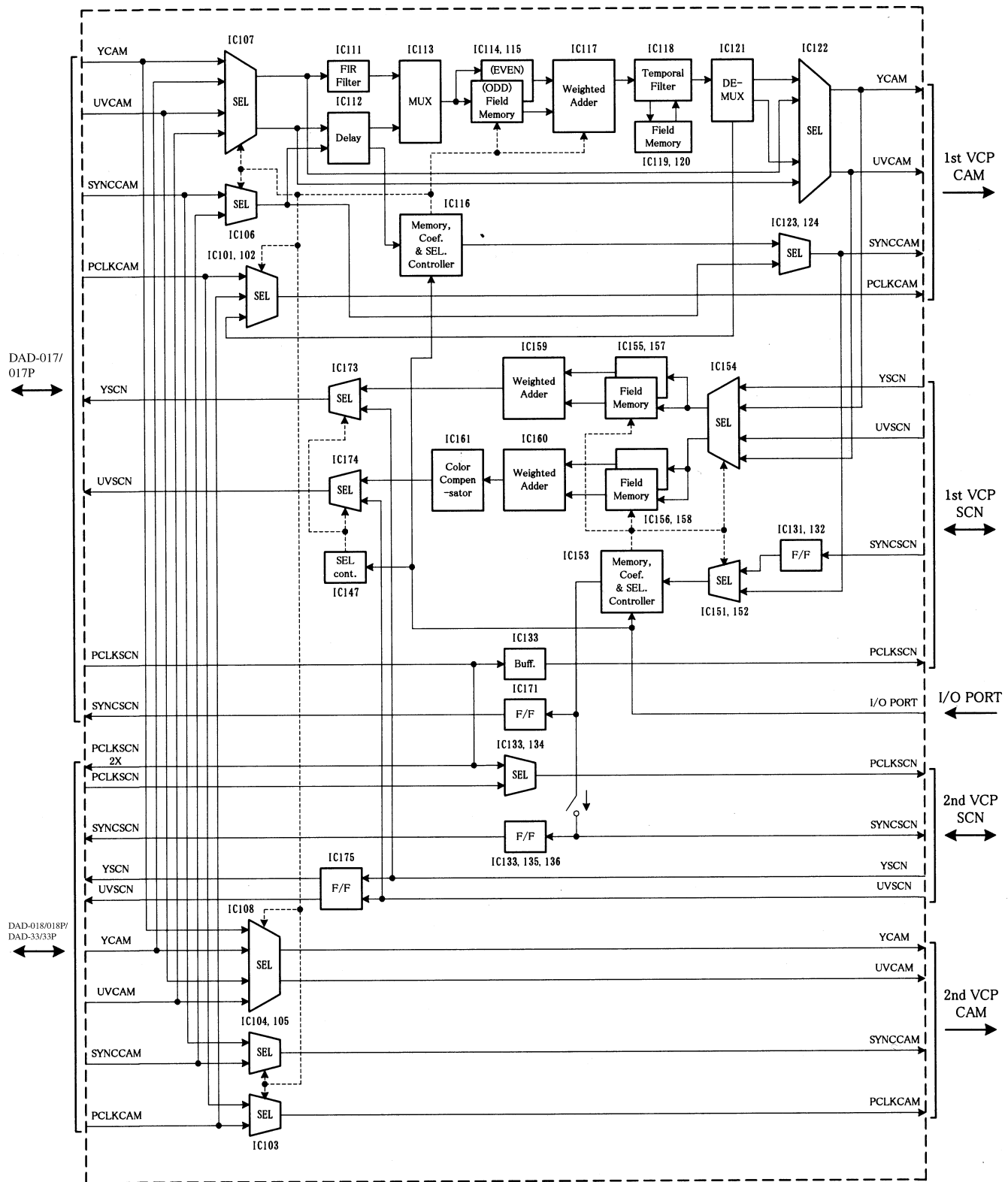


Fig. 3-5-2-1 VPR-019 board video signal processing system block diagram

3-5-2. Dividing the VPR-019 Circuit into Blocks and Outline of Operation

The VPR-019 board consists of the following seven blocks: the host interface block, 1st-VCP block, 2nd-VCP block, video selector block, NETW-VCP interface block, SCSI interface block and the SIRCS interface block. Fig. 3-5-2 shows the block diagram of the VPR-019 board and connection inside the board and with other boards.

Functions of each block are described below.

1. Host interface block

This is the bus interface with the CPU-202 board which means the host CPU itself. This block consists of the following circuits data bus transceiver, buffers, address decoder and generation of DMA cycle control signal, and so on.

The data bus (SD15-0) coming from the CPU-202 board is connected to each block through the bi-directional transceivers (HD15-0) of IC3 and IC4. The SA4-1 among the address bus (SA6-0) is input to each block through the selector (IC5). Using this selector, HA3-0 is fixed to "0" during the DMA cycle. (The 0 address port of VCP is accessed during the DMA cycle.) SA6-4 and 0 are decoded by IC6 and turn into the chip select signal for each block (device), the read/write pulse for two VCPs and the enable signal for the transceivers IC3 and IC4 after the signal is combined with other control signals. IC6 performs generation of the DMA request signal, read/write pulse during the DMA cycle and software reset signal for two VCP blocks.

If this block becomes defective, the setting from the host CPU cannot be performed correctly. If any error occurs in reading/writing to and from the I/O of all blocks, or in downloading the program to both two VCP blocks, this block is defective. (An error can occur only in accessing to a specific block depending upon the contents of the defect.)

2. 1st-VCP block

The 1st-VCP block has the functions of compression and decompression (H.261) of motion picture and multiplexing and demultiplexing of various data (H.221). (The area which is encircled by dotted line in Fig. 3-5-3.)

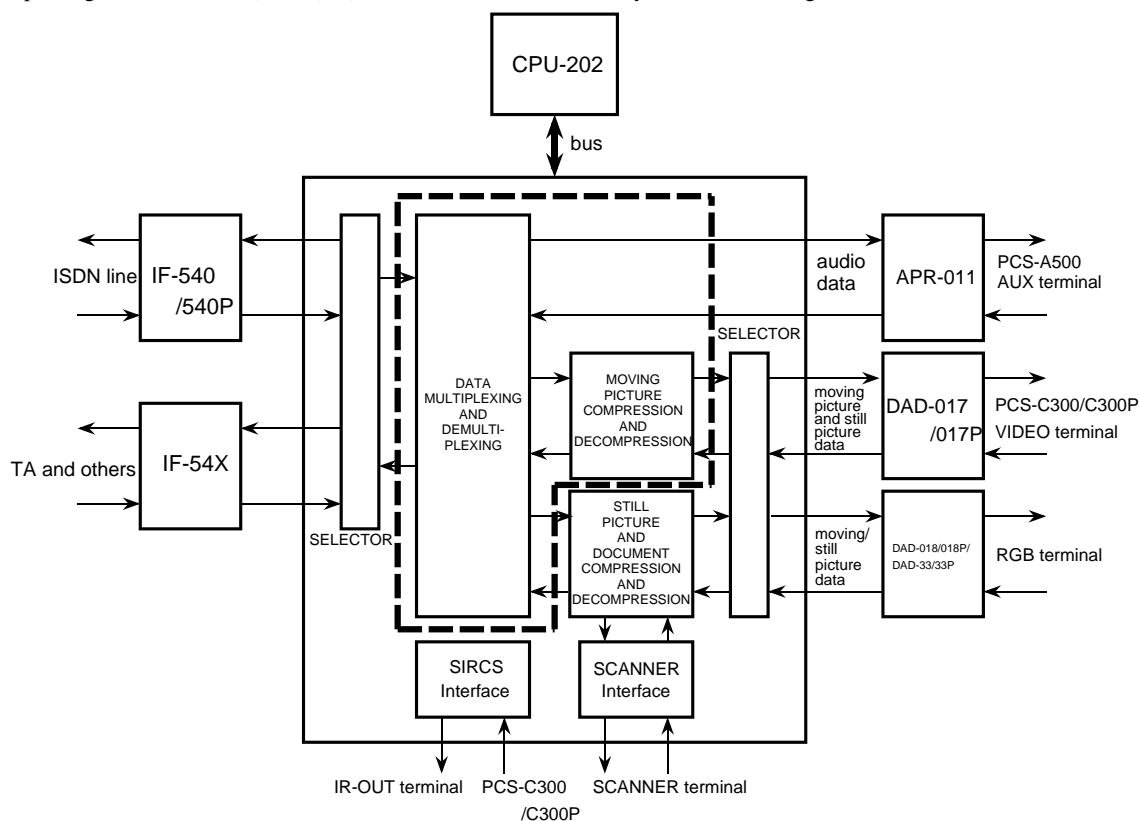


Fig. 3-5-3 Function Blocks of 1st-VCP Block

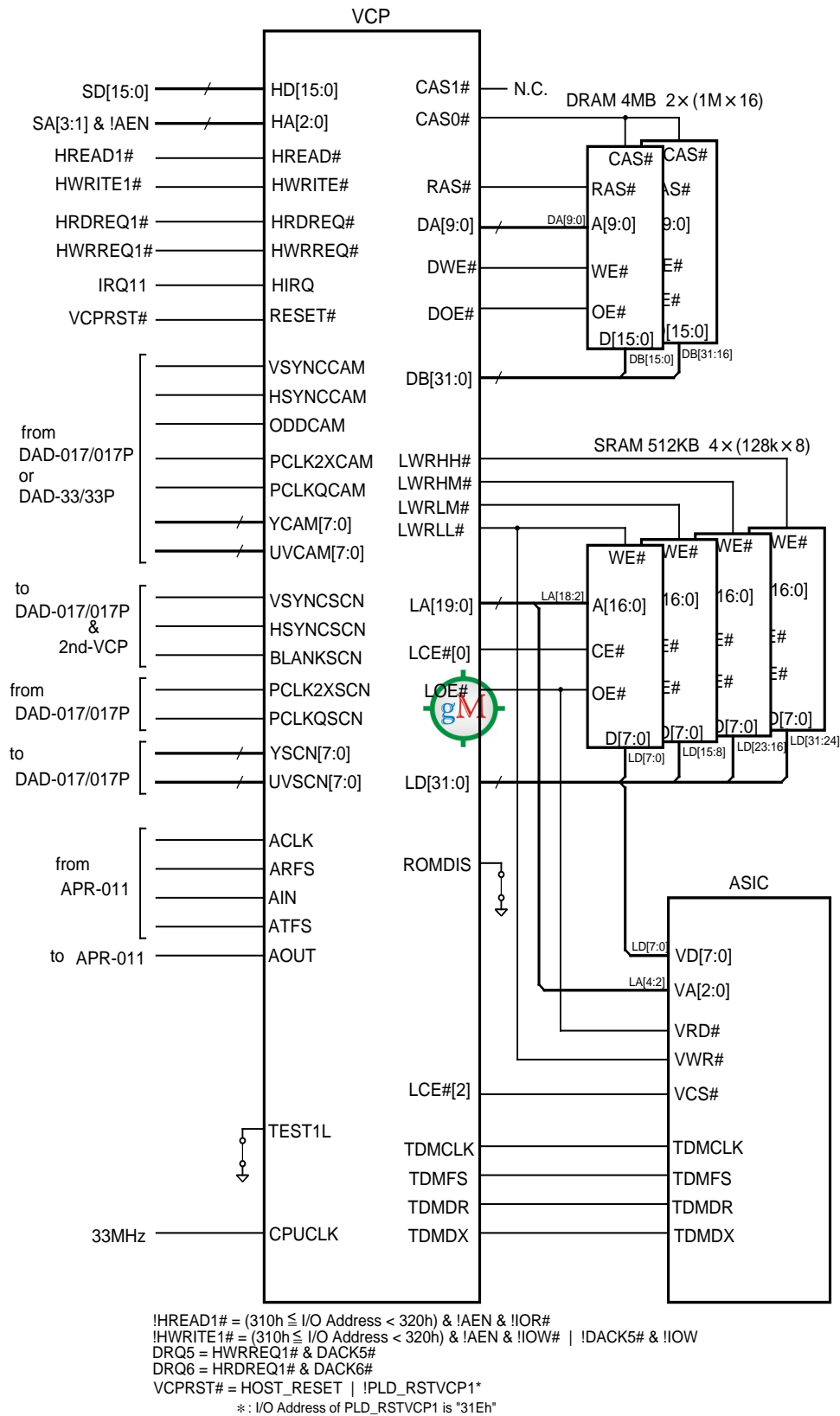


Fig. 3-5-4 Connection Diagram of 1st-VCP Block

The following ICs consist of the 1st-VCP block: VCP (33 MHz, IC301) which is the video and communication processor, SRAM (256K×8-bit×4, IC303 to IC306) for VCP program code and data, DRAM (1M×16-bit×2, IC307 and IC308) for VCP video data and crystal oscillator (36 MHz, X301). The functions are realized by means of the software of the VCP. Therefore, even if the hardware has no abnormality, the system will not work correctly if the downloading the program from the host CPU is not performed correctly. If downloading fails, it is important to locate that which board is the cause of trouble, CPU-202 board or VPR-019 board (for both hardware and software). If downloading fails due to a defective VPR-019 board, the previously described host interface block, VCP (IC301) host bus interface, SRAM interface, or SRAMs (IC303 to IC306) is likely to be defective.

Fig. 3-5-4 shows connection around the 1st-VCP block. The host bus interface is used for setting and reading the internal port, program downloading, and input and output of the data such as LSD, HSD. The 16-bit data line, 3-bit address line and other control lines are used, the interrupt is performed by the IRQ11, the DMA channel uses ch. 6 for reading from VCP (i.e., writing into memory) and ch. 5 for writing (i.e., reading from memory) to the VCP. (The DMA channels are set by the host interface circuit.) The video signal interface has the two signal systems: one is the CAM signal system which is input from the DAD-017/017P board via video selector, and the other is the SCN signal system which is output to the DAD-017/017P board. The video signal interface consists of the sync, pixel clock and 8-bit Y and UV signals. The audio signal interface consists of each 1-bit serial signal for both send and receive, which is connected to the APR-011 board. The TDM interface sends the data which is multiplexed inside the VCP and is output to external line, and receives the data which is input from external line and is demultiplexed inside the VCP, between the 1st-VCP block and the ASIC (IC201) of the NETW-VCP interface block. The SRAM interface is connected directly to the four 1M (128k×8) bit SRAMs. The SRAMs are used for storing the program code and data. If the SRAMs become defective, the VCP software will not work correctly, and the downloading cannot be performed correctly in some cases. The DRAM interface is connected directly to the two 16M (1M×16) bit DRAMs. Because the DRAMs are used for storing the video data, the video signal is adversely affected if the DRAM interface becomes defective.

3. 2nd-VCP block

The 2nd-VCP block has the functions of compression and decompression (JPEG) of still picture, coding and decoding (MMR) of document and control of LAP-B protocol. (The area which is encircled by dotted line in Fig. 3-5-5.)

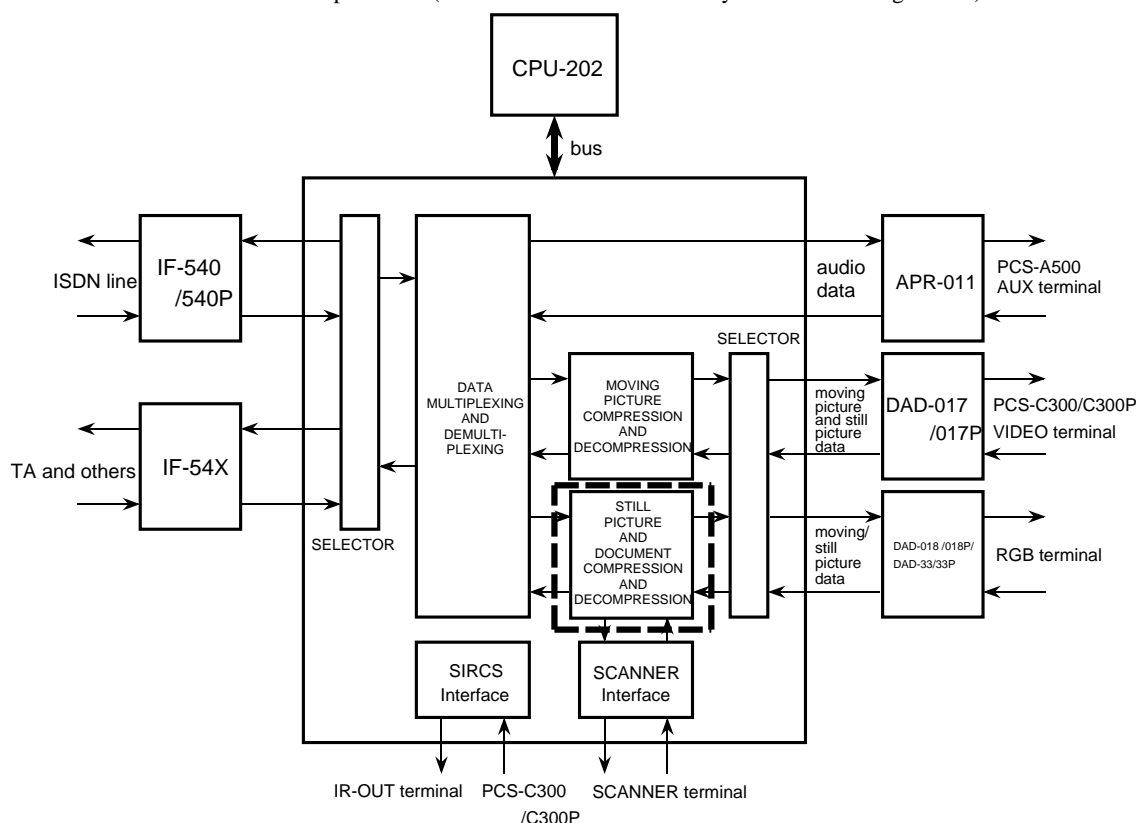


Fig. 3-5-5 Function Blocks of 2nd-VCP Block

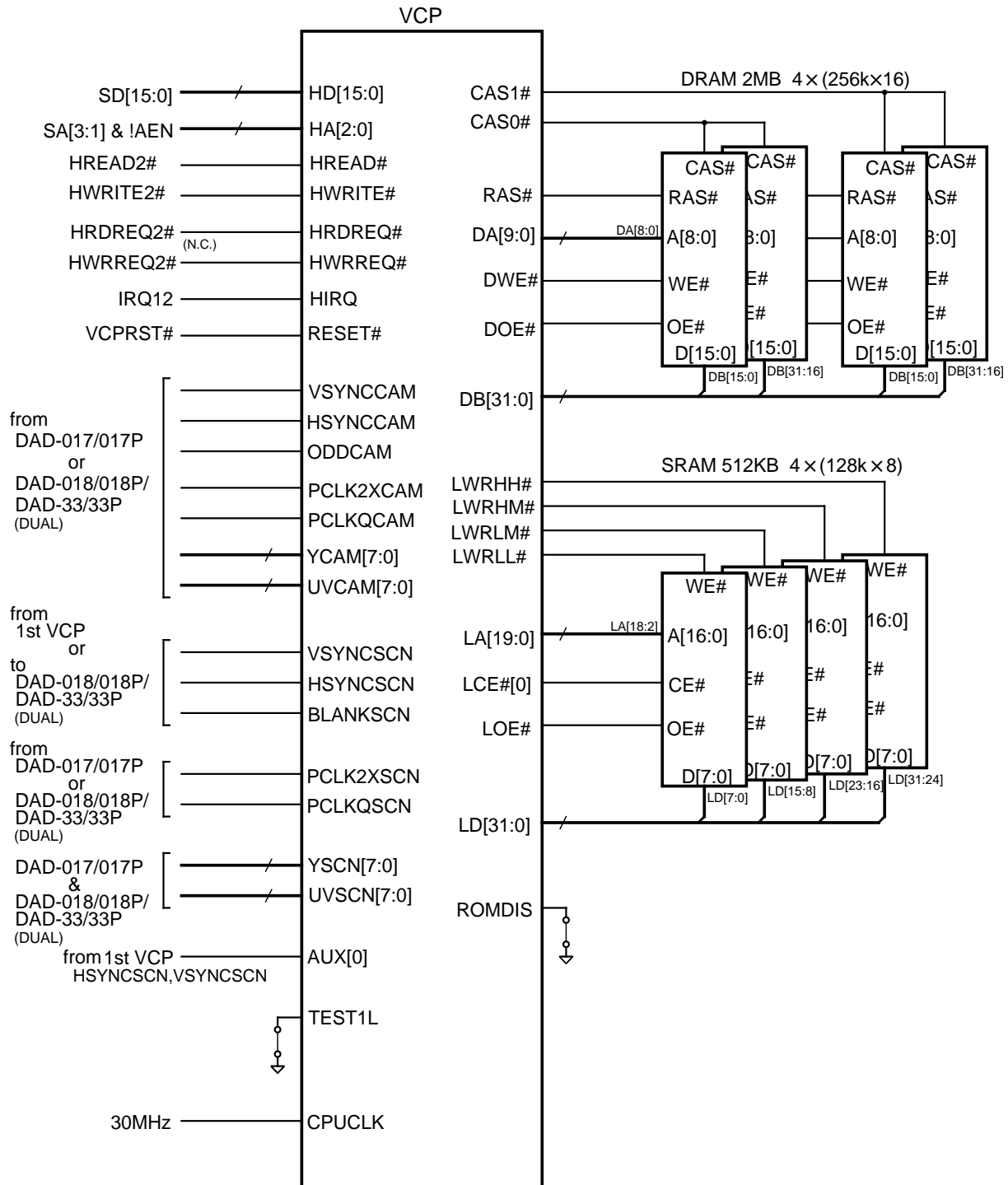


Fig. 3-5-6 Connection Diagram of 2nd-VCP Block

The ICs consisting of the 2nd-VCP block are same as those of the 1st-VCP block as follows except that speed of VCP, SRAM and DRAM is different, and the DRAM capacity is different: VCP (30 MHz, IC401) which is the video and communication processor, SRAM (256K×8-bit×4, IC403 to IC406) for VCP program code and data, DRAM (256k×16-bit×4, IC407 to IC410) for VCP video data and crystal oscillator (33 MHz, X401). The functions are realized by means of the software of the VCP. Therefore, even if the hardware has no abnormality, the system will not work correctly like the 1st-VCP if the downloading the program from the host CPU is not performed correctly. If downloading fails, it is important to locate that which board is cause of trouble, CPU-202 board or VPR-019 board (for both hardware and software). If downloading fails due to a defective VPR-019 board, the previously described host interface block, VCP (IC401) host bus interface, SRAM interface, or SRAMs (IC403 to IC406) is likely to be defective.

Fig. 3-5-6 shows connection around the 2nd-VCP block. The host bus interface is used for setting and reading the internal port, program downloading, sending and receiving the compressed data for the 1st-VCP (data multiplexing and demultiplexing function), receiving the read-out document from the scanner and sending the document data which is output to the printer. The 16-bit data line, 3-bit address line and other control lines are used, the interrupt is performed by the IRQ12, the DMA channel uses ch. 7 for writing (i. e., reading from memory) only to the VCP. (The DMA channels are set by the host interface circuit.) The video signal interface has the two signal systems: one is the CAM signal system which is input from the DAD-017/017P or DAD-018/018P/DAD-33/33P boards either which is selected by the video selector block, and the other is the SCN signal system which is output to the video selector block, then to the DAD-017/017P or DAD-018/018P/DAD-33/33P boards. The video signal interface consists of the sync, pixel clock and 8-bit Y and UV signals. The 1st-VCP block uses the sync signal of the SCN signal system as the main (which is output from the VCP) always, but the 2nd-VCP operates as a sub (which is input to the VCP) in order to synchronize with the 1st-VCP block in the case of outputting the SCN signal to the DAD-017/017P board. The SRAM interface is connected directly to the four 1M (128k×8) bit SRAMs. The SRAMs are used for storing the program code and data. If the SRAMs become defective, the VCP software will not work correctly, and the downloading cannot be performed correctly in some cases. The DRAM interface is connected directly to the four 4M (256k×16) bit DRAMs. Because the DRAMs are used for storing the video data, the video signal only is adversely affected if the DRAM interface becomes defective. The audio and TDM interfaces are not used in the 2nd-VCP block.

4. Video signal processing block

The video signal processing block performs functions such as video signal path setting between the DAD-017/017P, DAD-33/33P boards and the 1st-VCP, 2nd-VCP blocks, timing adjustment, scanning line conversion (NTSC, PAL↔CIF) and filtering of the transmission video signal.

(Refer to Fig. 3-5-2-1 VIDEO BLOCK.)

4-1. Transmission system (CAM system)

The video signals that are supplied from the DAD-017/017P and DAD-33/33P boards, are input to this board where the desired signal is selected and the signal processing is applied. The selected video signal is sent to the 1st-VCP block from which the video signal is transmitted as the moving picture and the 4CIF still picture. The selected video signal is also sent to the 2nd-VCP block from which the video signal is transmitted as a JPEG still picture.

The input video signals that are input from the DAD-017/017P and DAD-33/33P boards are sent to the respective selectors which select the video signals to be sent to the 1st-VCP and 2nd-VCP blocks respectively. (The selectors for the 1st-VCP block are IC101, IC102, IC106 and IC107, while the selectors for the 2nd-VCP block are IC103, IC104, IC105 and IC108.) The signal that is selected for the 2nd-VCP block is sent to the 2nd-VCP block directly from the selector. However, the signal that is selected for the 1st-VCP block takes different signal paths in the moving picture transmission mode and in the 4CIF still picture transmission mode. During the 4CIF still picture transmission mode, the selected signal (NTSC: 704×480, PAL: 704×576) is output to the 1st-VCP block while maintaining the original signal format. However, during the moving picture transmission mode, the selected signal passes through the FIR filter, line number conversion circuit and temporal filter, then is output to the 1st-VCP block in the CIF format (352×288). Either of the two signals is selected by the selector (IC122, IC123 and IC124).

During the moving picture transmission mode, the Y-signal bandwidth is reduced to one half by the FIR filter (IC111) so that no aliasing noise is generated when the video signal is converted to the CIF format. The UV signal and the sync signal are passed through the shift register (IC112) to match the delay time with the Y signal. Then the Y- and UV-signals are time-multiplexed to an 8-bit signal by IC113. The multiplexed signal is input to the field memory (IC114, IC115) where the odd field signal and the even field signal of the multiplexed signal are written into separate memories that are controlled by the memory controller (IC116). The multiplexed data are read from the field memory at the timing of the CIF format, which is also controlled by IC116. The read-out data is input to the weighted adder (IC117) where the data is converted to the CIF format signal by controlling the coefficients multiplied by the odd/even field outputs in every horizontal line and using adder. This control is performed by IC116. Thus the CIF format signal is created and sent to the temporal filter (IC118, IC119, IC120). In the temporal filter, the signal passes through a low-pass filter of the time-axis direction using the field recursive system. The low-pass filtering reduces the amount of information and increases the efficiency of moving picture compression by blurring the moving portions only. Noise reduction is performed at the same time using this function. The output signal from the temporal filter (CIF) is sent to the selector together with the 4CIF still picture input signal (NTSC, PAL), then one of them is selected and sent to the 1st-VCP block. Various controls such as selector setting, filter setting for heavy or light filtering and other functions are performed by the CPU board via the I/O port, 1st-VCP block and IC116.

4-2. Reception system (SCN system)

The video signal that is received as the moving picture and as the 4CIF still picture is input to this block from the 1st-VCP block. The video signal that is received as the JPEG still picture/document is input to this block from the 2nd-VCP block. One of the two input signals is selected in this block, passed through the signal processing and is output to both of the DAD-017/017P and DAD-33/33P boards.

The video signal that is output to the DAD-017/017P board can be either the selected signal between the signal coming from the 1st-VCP block and that coming from the 2nd-VCP block, or a mixture of the two signals for the PinP display. This selection of video signal is performed by the selector (IC173, IC174). Its control and PinP display timing generation are performed by IC147. This selector receives the output signal from the 2nd-VCP block directly, but receives the signal from the 1st-VCP block after the signal processing.

The video signal that is input from the 1st-VCP block is sent to the selector (IC151, IC152, IC154) together with the output signal to the transmission system 1st-VCP block. In this selector, one of the signals is selected. (The input signal from the 1st-VCP block is normally used. The other input is prepared for a bypass that is used to locate the source of troubles during maintenance.) The selected signal is input to the field memories (IC155, IC157 (Y), IC156, IC158 (UV)) and is written while the writing timing is controlled by the memory controller (IC153). Reading out is performed while the reading timing is controlled by the memory controller (IC153) in the same manner, and is output to the weighted adder (IC159 (Y), IC160 (UV)). This field memory and the weighted adder operate differently in the 4CIF still picture input mode and the moving picture input mode. When the 4CIF still picture is input, it is supplied in the format (interlace) of either NTSC (704×480) or PAL (704×576), so that the written data is read out as is without performing the horizontal line number conversion. When the moving picture is input, the video signal is supplied in the non-interlaced format of 704×288, so the horizontal line number conversion is performed here. The video signals that are read from the two field memories at the timing of NTSC or PAL format are multiplied by coefficients (which are controlled by IC153) and added by the weighting adder in every horizontal line, and are output as the NTSC or PAL format video signal. Among the video signal components, the UV signals are passed through the color corrector (IC161) and are input to the selector (IC173, IC174) while the Y-signal is directly input to the selector. Either this input or the input signal coming from the 2nd-VCP block is selected and is output to the DAD-017/017P board.

Only the video signal that is input from the 2nd-VCP block is output to the DAD-33/33P board (dual monitor board) through IC175 that acts as a flip-flop.

Regarding the sync signal generation, the 1st-VCP block generates the H. sync and V. sync from the reference clocks (27 MHz, 13.5 MHz) that are input from the DAD-017/017P board. These sync signals are sent to IC153 where the NTSC or PAL sync signal is generated in synchronism with the field memory output, and are output to the DAD-017/017P board via the flip-flop (IC171). The 1st-VCP block operates always in the master mode of the sync system, while the 2nd-VCP block operates both in the single monitor mode and the dual monitor mode that have different sync system operations. In single monitor mode, the sync signal that is generated by IC153 is used as the reference signal to which the 2nd-VCP block is locked and outputs the video signal and sync signal (slave mode). In dual monitor mode, on the other hand, the 2nd-VCP block generates the sync signals by itself using the clock signal that is input from the DAD-017/017P board, and outputs the video signal that is locked to the internally generated sync signal (master mode).

The sync signal that is output to the DAD-017/017P board is the sync signal that is output from IC153 through a flip-flop (IC171). The DAD-017/017P board performs video encoding using the sync signal as the reference and outputs the NTSC or PAL video signal to external circuit. The sync signal that is output to the DAD-33/33P board is the sync signal that is supplied from IC153 in signal monitor mode, or the sync signal that is output from the 2nd-VCP block via the flip-flop (IC136) in dual monitor mode. The DAD-33/33P board performs video encoding using the sync signal as the reference and outputs the NTSC or PAL video signal to the external circuit.

If the video signal processing block becomes defective, it affects the video signal only. To locate the source of trouble, first determine whether the 1st-VCP input/output system or the 2nd-VCP input/output system is defective. Then determine whether the transmission system (CAM system) or the reception system (SCN system) is defective using the debug connection, loopback connection or test signal generation using VCP. Then use the 1st-VCP bypass function and the NTSC/PAL→CIF converter bypass function that can be activated by the selector setting, in order to locate the source of trouble. At the same time, locate the source of trouble by following the signal flow from input to output.

5. NETW-VCP interface block

The NETW-VCP interface block performs matching of the signal between the 1st-VCP block which is multiplexing and demultiplexing data, and the external line interface blocks, as shown in the area which is encircled by the dotted line of illustration. Selection of the signal supplied from external lines is performed by this block. (Fig. 3-5-7)

The ICs consisting of the NETW-VCP interface block are the ASIC (IC201) which is specially designed, and the crystal oscillator (X201) oscillating the operation clock for the ASIC. The 1st-VCP block inputs and outputs the multiplexed data (the data before demultiplexing) through the TDM interface as described before. Because the TDM interface uses only one serial signal line for both sending and receiving, the TDM interface cannot be connected to the external line interface blocks. For example, in the case of the BRI interface of ISDN is selected as the external line interface, number of the 64 kbps serial signal lines for each B channel changes from 1 to 6 lines depending upon the number of using lines. In the case that the leased line (TA) interface is used, the two serial signal lines are used by DUAL V.35 and others. These multiple serial signal lines are bunched as one transmission line by establishing synchronization between the signals and vice versa. This is the main function of the NETW-VCP interface block. The function of detecting the bearer rate (transmission rate) in the H0 mode of the leased line (TA) interface is performed by this IC too.

If the NETW-VCP interface block becomes defective, the data transfer with the external line interface block becomes defective. As a result, data communication becomes impossible. If a trouble occurs, confirm first that the operation of setting to IC201 are correct by reading/writing from or to the resistor inside IC201, then locate cause of the trouble by setting the loop back inside the IC.

In addition, the output port in which the settings for the video selector block are performed, and the input/output port for the signal transfer between the host CPU and the SIRCS interface block, are included in IC201. The NETW-VCP interface blocks is likely to be defective, if the settings to these blocks cannot be performed by the host CPU.

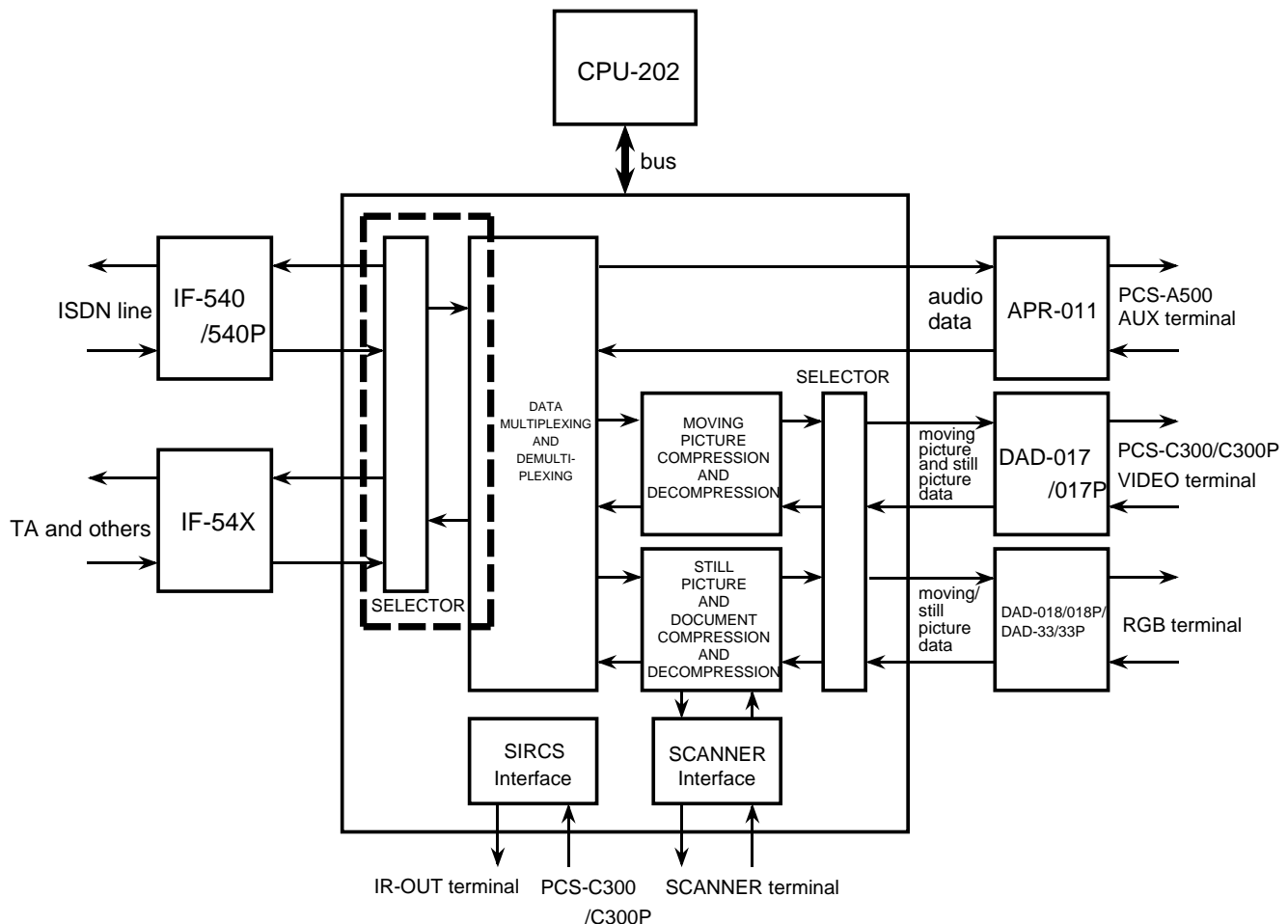


Fig. 3-5-7 Function Blocks of NETW-VCP Interface Block

6. SCSI interface block

The SCSI interface block is connected to the document scanner via the SCSI bus. It has the function of controlling the scanner and reading the document data from the scanner. Fig. 3-5-8 shows connection diagram of the SCSI interface block.

The SCSI bus (CN501) is connected directly (with the filter for inserted to reduce radiated EMI problems) to the SCSI controller (IC501) with termination resistor. Data transfer with the SCSI controller is performed using the host bus only. The document data which is received by the host CPU is sent again to the 2nd-VCP block via the host bus. Interface with the host bus is established using the 4-bit address and 8-bit data with the interrupt of IRQ14. The DMA channel is assigned to ch. 0.

If this block becomes defective, the problem such that the correct data cannot be read, or scanner cannot be controlled, occurs. Check connection between the connector CN501 and cable, then check interface with the host bus using the I/O verification technique. After the connections are confirmed, check IC501 if it is defective.

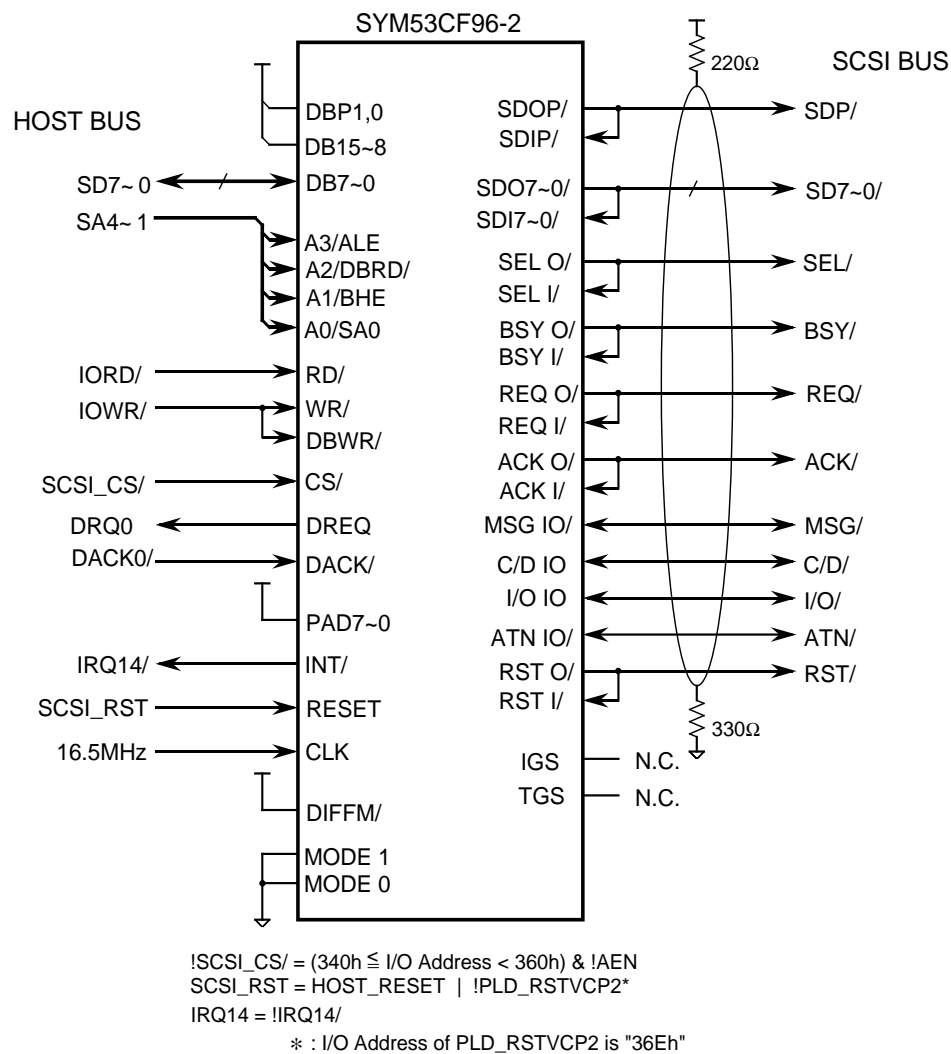


Fig. 3-5-8 Connection of SCSI Interface Block

7. SIRCS interface block

The SIRCS interface block performs decoding the received SIRCS signal which is input to CN-1218 board from the infra red receiver of the camera unit (PCS-C300/C300P), and encoding the transmitting SIRCS signal which is output to the IR-OUT terminals (CN201 and CN202) for controlling the monitor or TV set, using the microcontroller (IC202) and crystal oscillator (X202) generating clock signal for IC202. After the SIRCS signal is received and decoded, it is sent to the host CPU via I/O port of IC201 (NETW-VCP interface block) and the host bus. IRQ1 is used for interrupt to the host CPU during SIRCS signal reception. The SIRCS signal which is encoded and transmitted, is set using the I/O port of IC201 (NETW-VCP interface block) from the host CPU. (Refer to Fig. 3-5-9.) If the SIRCS signal cannot be sent or received, it is recommended to check the signal on the signal path first before starting to check IC202.

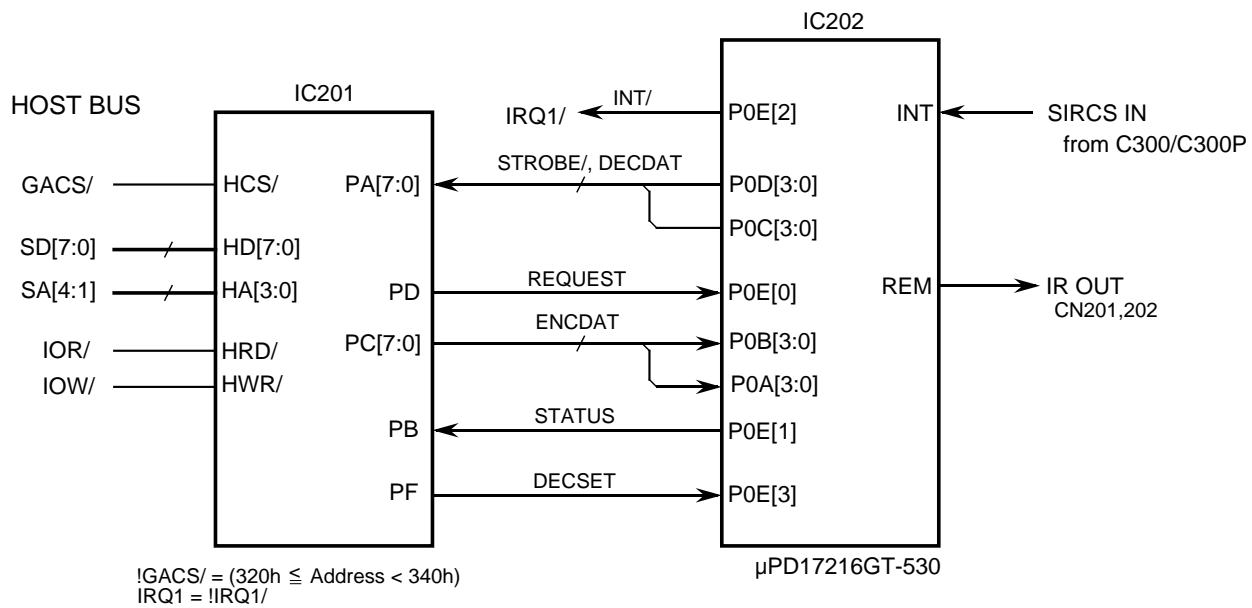


Fig. 3-5-9 Connection Diagram of the SIRCS Interface Block

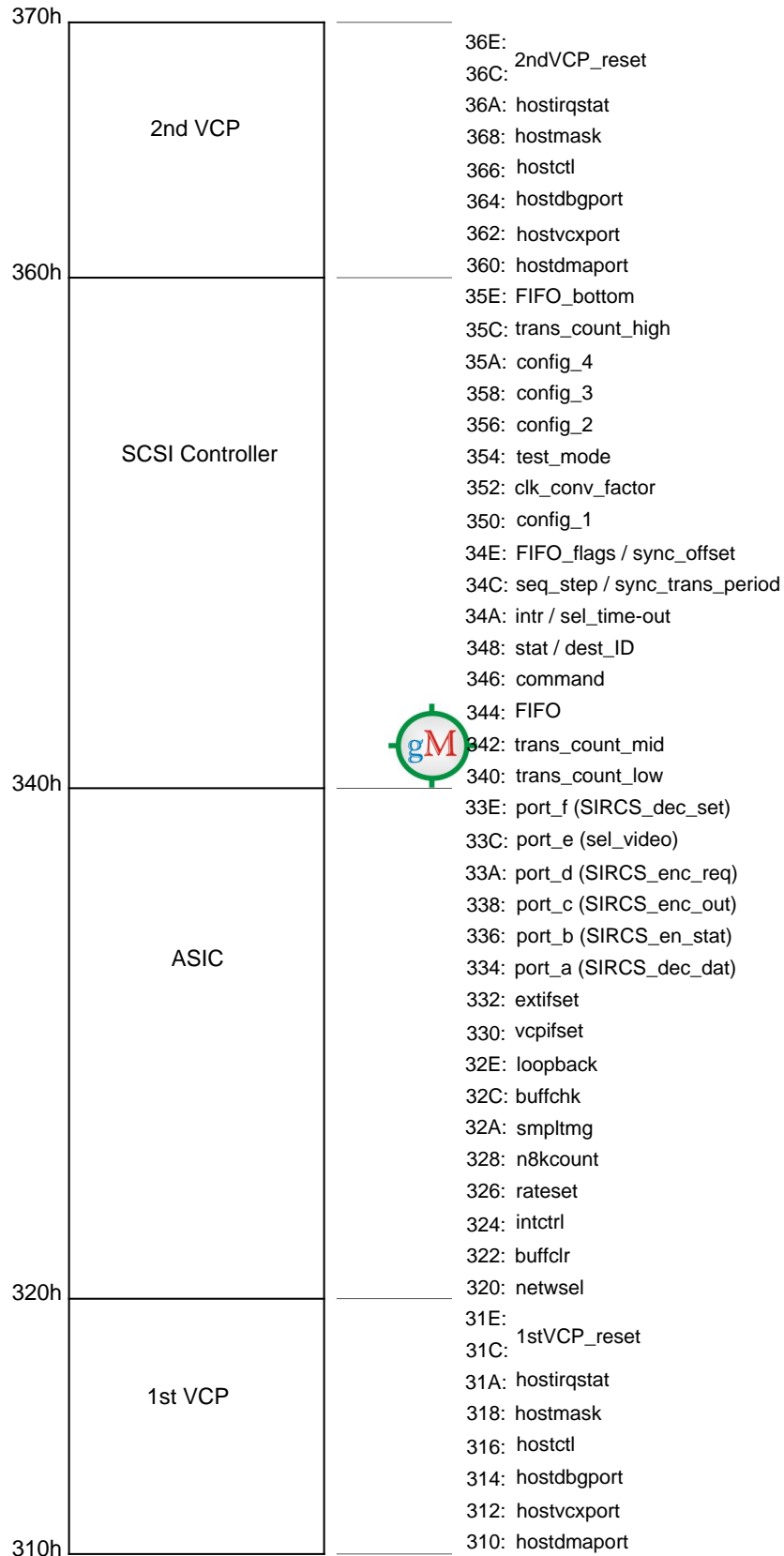
3-5-4. VPR-019 Board I/O Map

Fig. 3-5-11 VPR-019 Board I/O Map

3-6. VPR-019 BOARD TROUBLESHOOTING

[Equipment required]

- PCS-5100/5100P system
 - Rollabout processor (PCS-P500/P500P)
 - Camera unit (PCS-C300/C300P)
 - Audio unit (PCS-A500/A510)
 - Remote commander (PCS-R500)
- Dual monitor board (PCS-G510/G510P)
- V.35 board (PCS-I500)
- V.35 cable (PCS-K32) (two cables)
- Oscilloscope
- Video monitor
- Audio signal source (CD, etc.)
- Camera unit connection cable (supplied accessory)
- Audio unit connection cable (supplied accessory)

[Service tools]

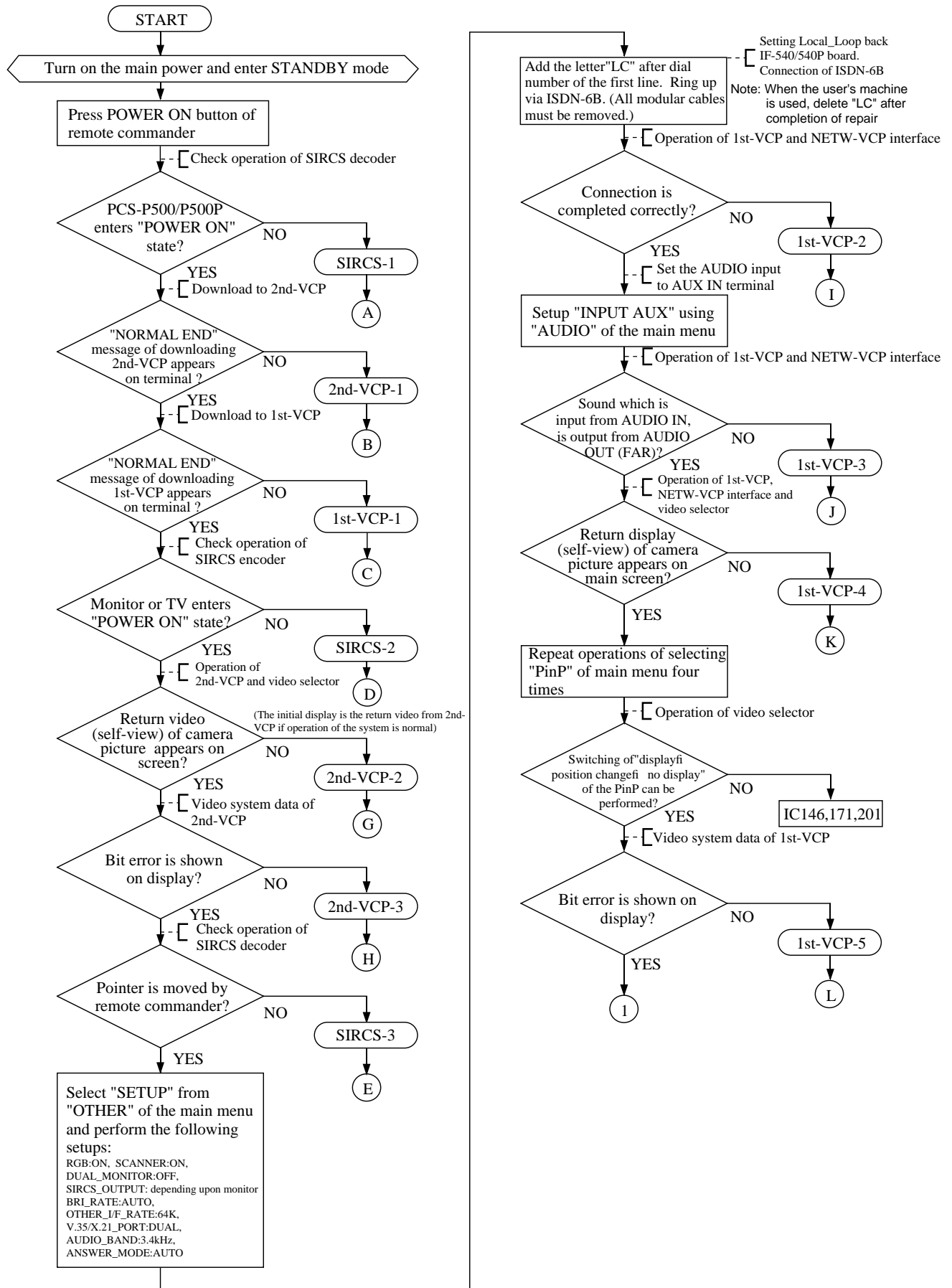
- Loop back tool (Sony part number: J-6387-400-B)
- RS-232C terminal (PC/AT compatible machine with communication software "CCT")
- RS-232C cross cable
- S cable

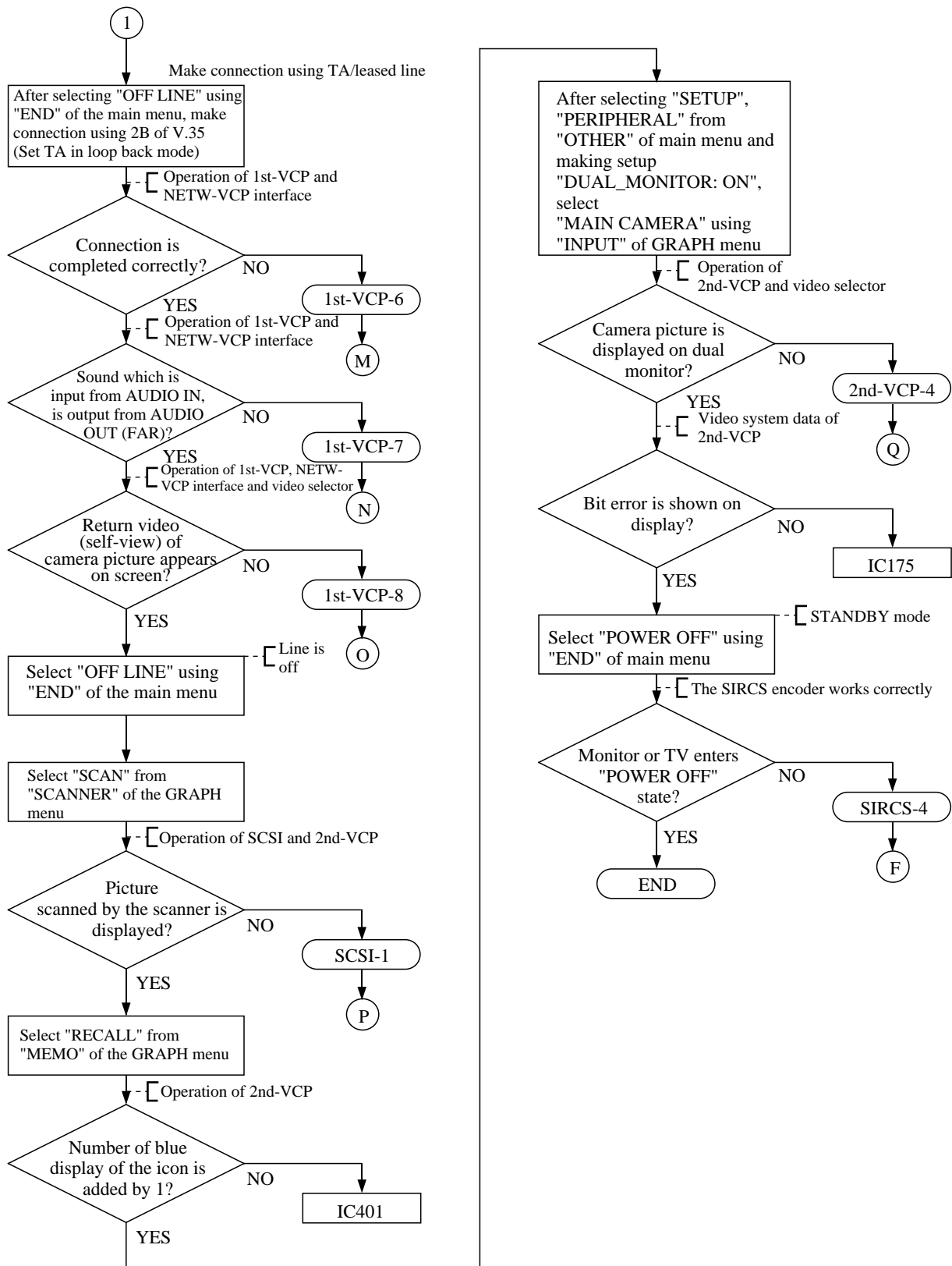
[Preparation]

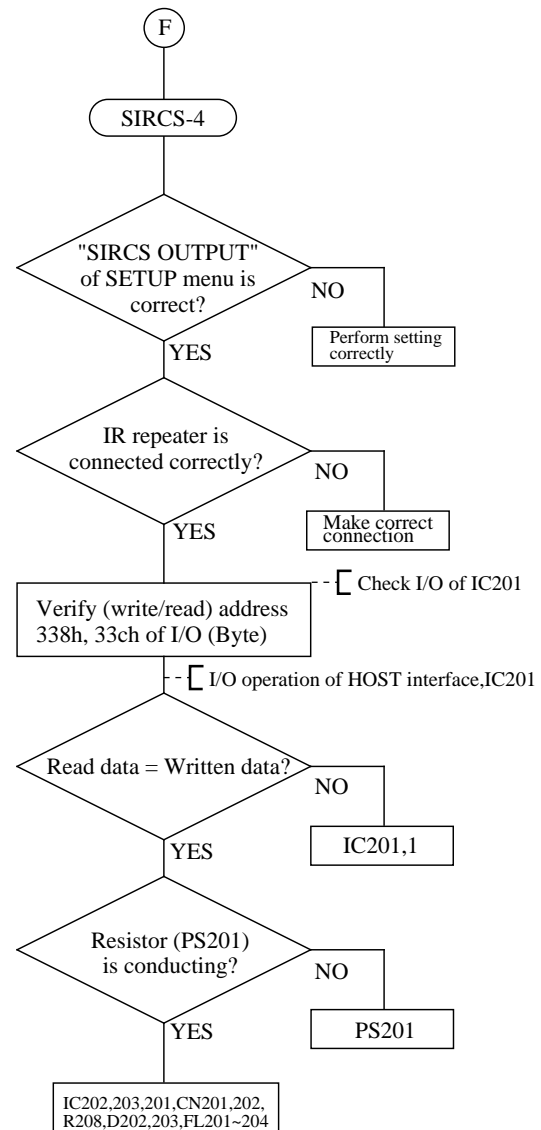
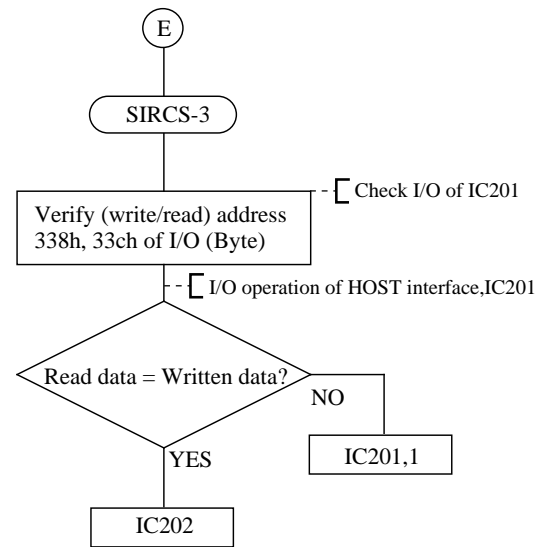
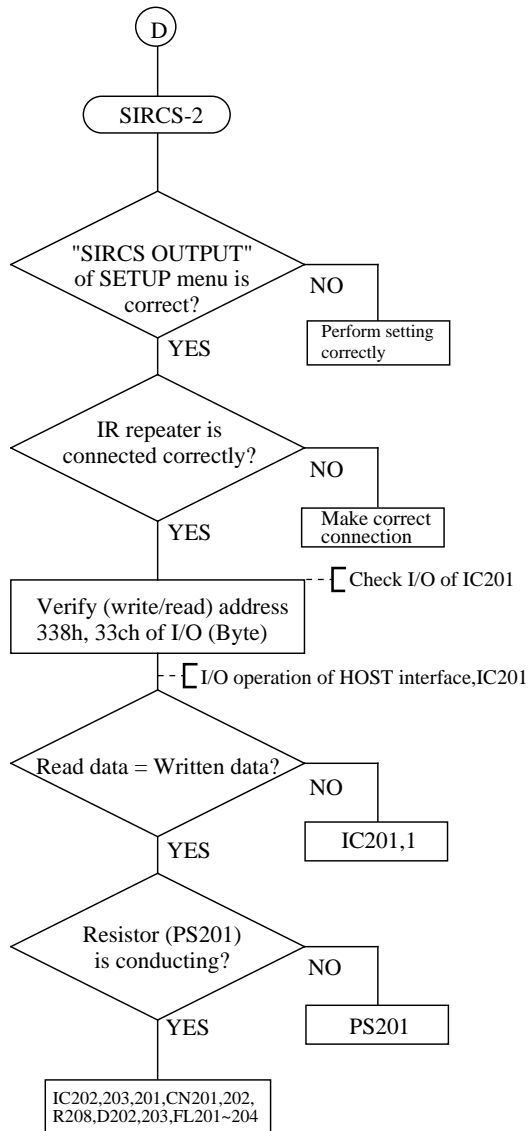
- 1) Set up the PCS-5100/5100P system to the normal operating condition.
- 2) Insert the V.35 board (PCS-I500) and the dual monitor board (PCS-G510/G510P) to the specified slots.
- 3) Prepare an oscilloscope.
- 4) Connect the RS-232C terminal (to be abbreviated simply as terminal hereafter) to the AUX CONTROL terminal of the rollabout processor (PCS-P500/P500P).
- 5) Connect the V.35 PORT1-A and the RS-366 PORT1-A terminal of the loop back tool to the V.35-A terminal of the rollabout processor (PCS-P500/P500P) using the V.35 cable (PCS-K32).
- 6) Connect the V.35 PORT1-B and the RS-366 PORT1-B terminal of the loop back tool to the V.35-B terminal of the rollabout processor (PCS-P500/P500P) using the V.35 cable (PCS-K32).
- 7) Select the following positions of the loop back tool.
 - V.35 communication speed select switch: 64K position
 - CTRL: OFF (upper)
 - V.35: OFF (upper)
- 8) Turn on the main power of the loop back tool.
- 9) Start up the communication software "CCT" which is installed in the terminal.
 - Set the communication speed to 9600 bps.
- 10) Turn on the main power of the PCS-5100/5100P system.
- 11) Turn on the main power from the remote commander (PCS-R500).

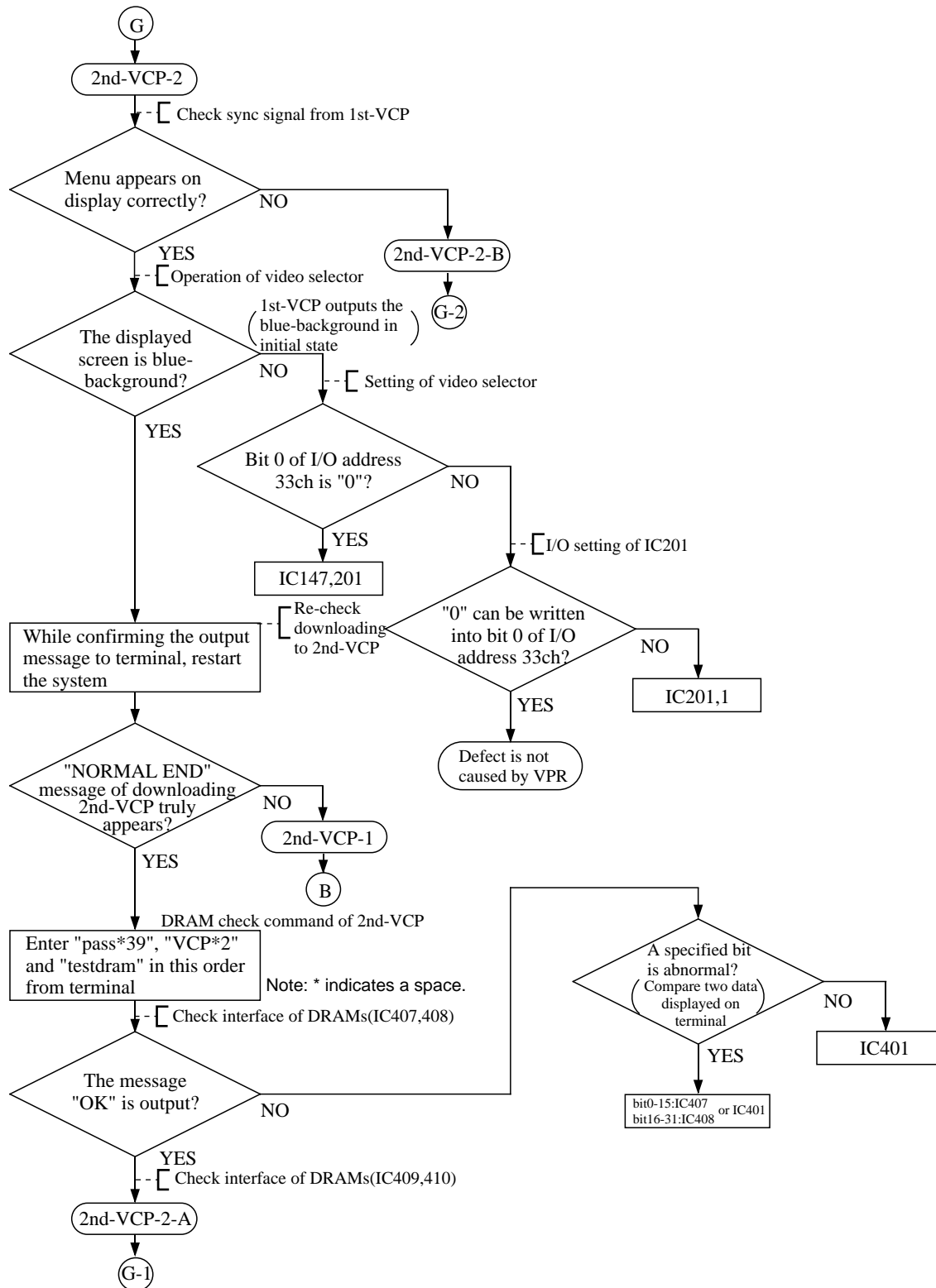
[Precautions]

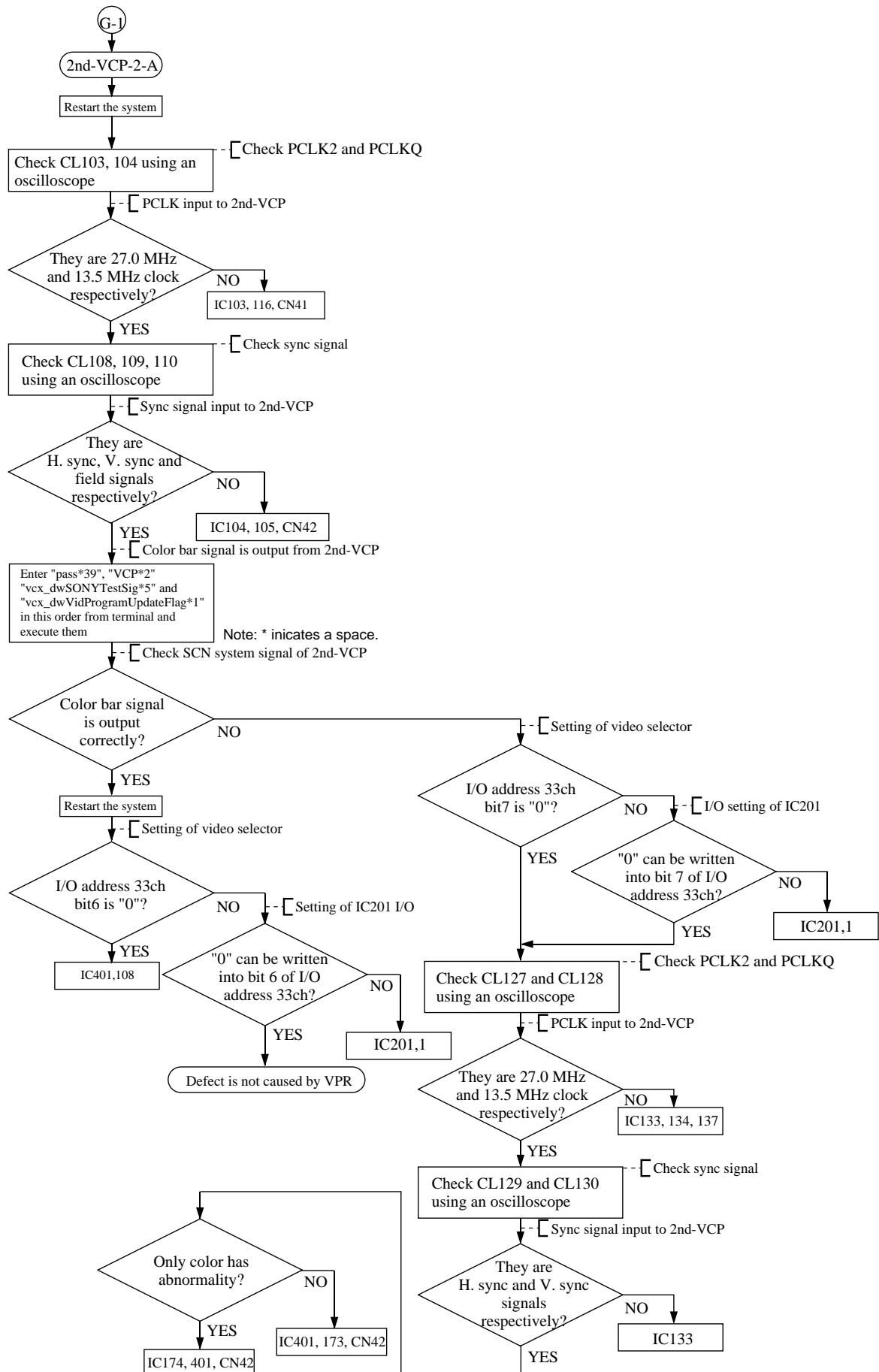
- (1) Start repair after making sure that the VPR-019 board is defective using the board exchange technique.
- (2) Turn on the main power of the loop back tool prior to turn on the main power of the PCS-P500/P500P.
- (3) Before proceeding to check each item of the troubleshooting charts attached, confirm that the LED D2 (red, indicating RESET) is turned off and D3 (green, indicating POWER ON) is turned on when the PCS-P500/P500P is powered on. If LED indication is different from the normal lighting, check IC6, IC7, IC204, switch S1 and CN41.
- (4) Proceed to the operation check in the sequence shown in the attached charts. Each chart is configured on the premise that all of the previous items to be checked are normal. If any abnormality in the previous item is ignored and the next item is executed, any correct judgment cannot be expected.
- (5) Many command inputs are used from the terminal. It is the premise that the debugger "PCS>" can be used.
- (6) When repair work of any circuit board is completed, perform checking using the troubleshooting flow charts to confirm that the items are checked to be correct even though the items have already been checked before the board is repaired. Thus any new defect which is accompanied by the repair work, can be found.
- (7) In order to input any command from the terminal, enter the debug mode when the main power is turned on.

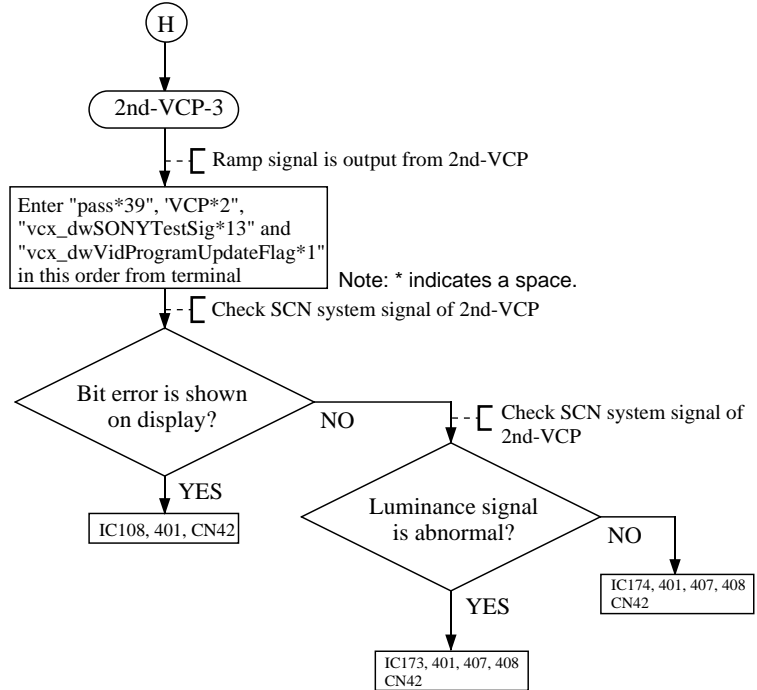
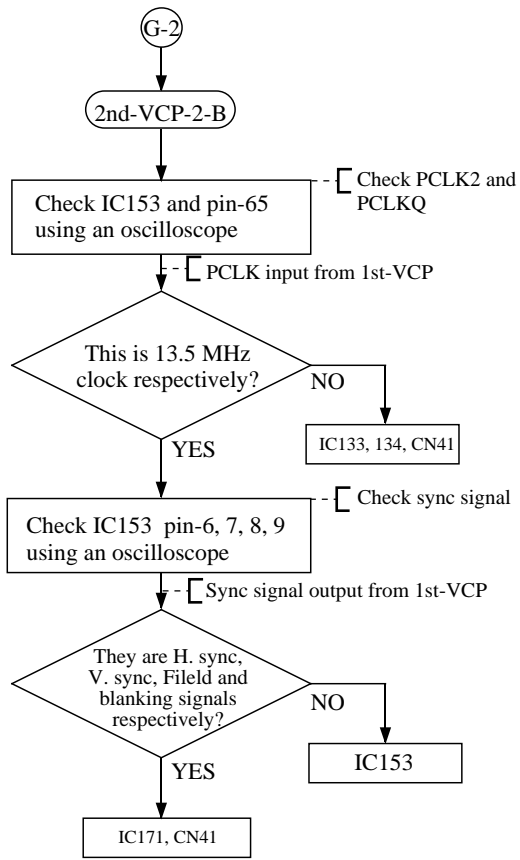


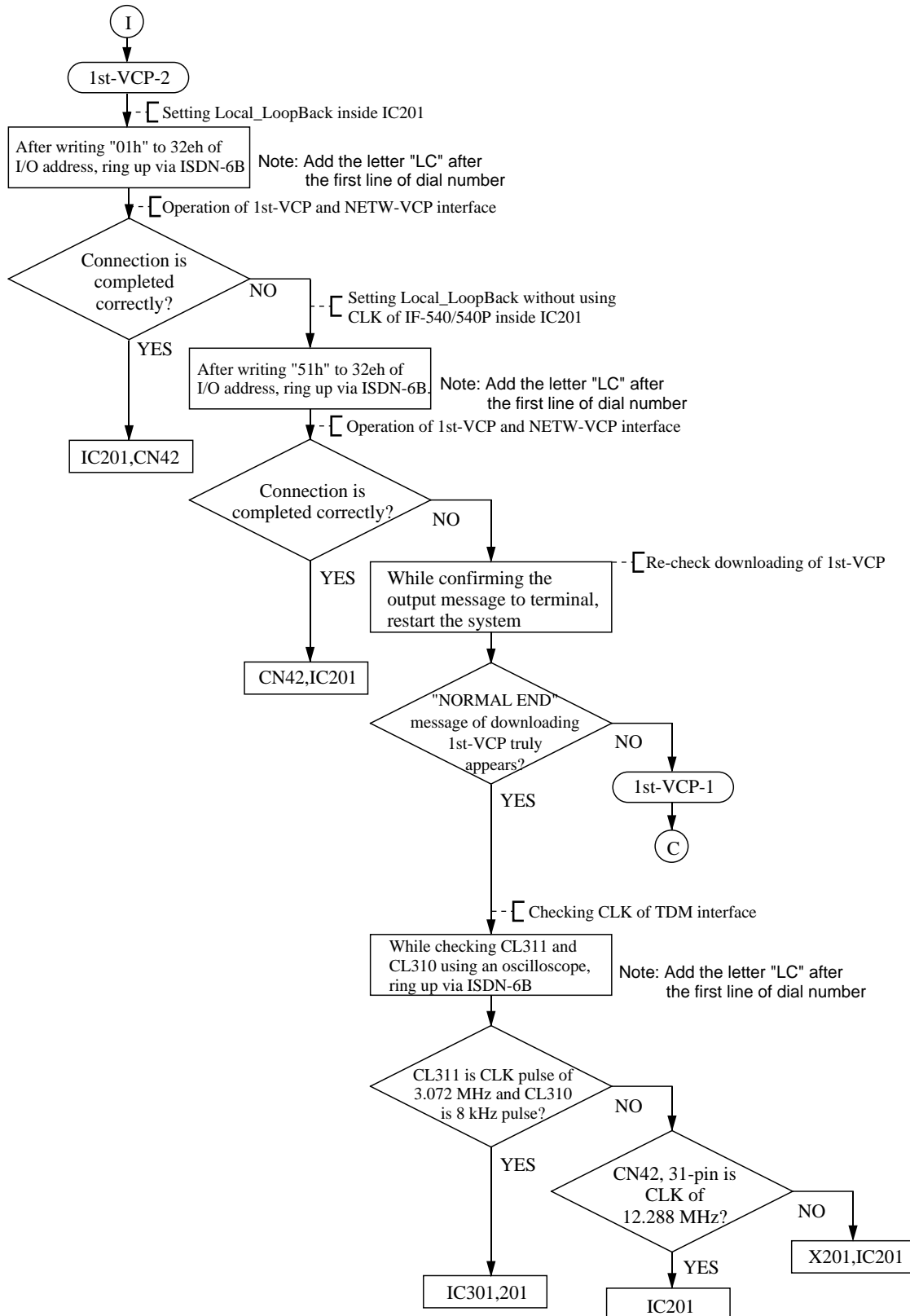


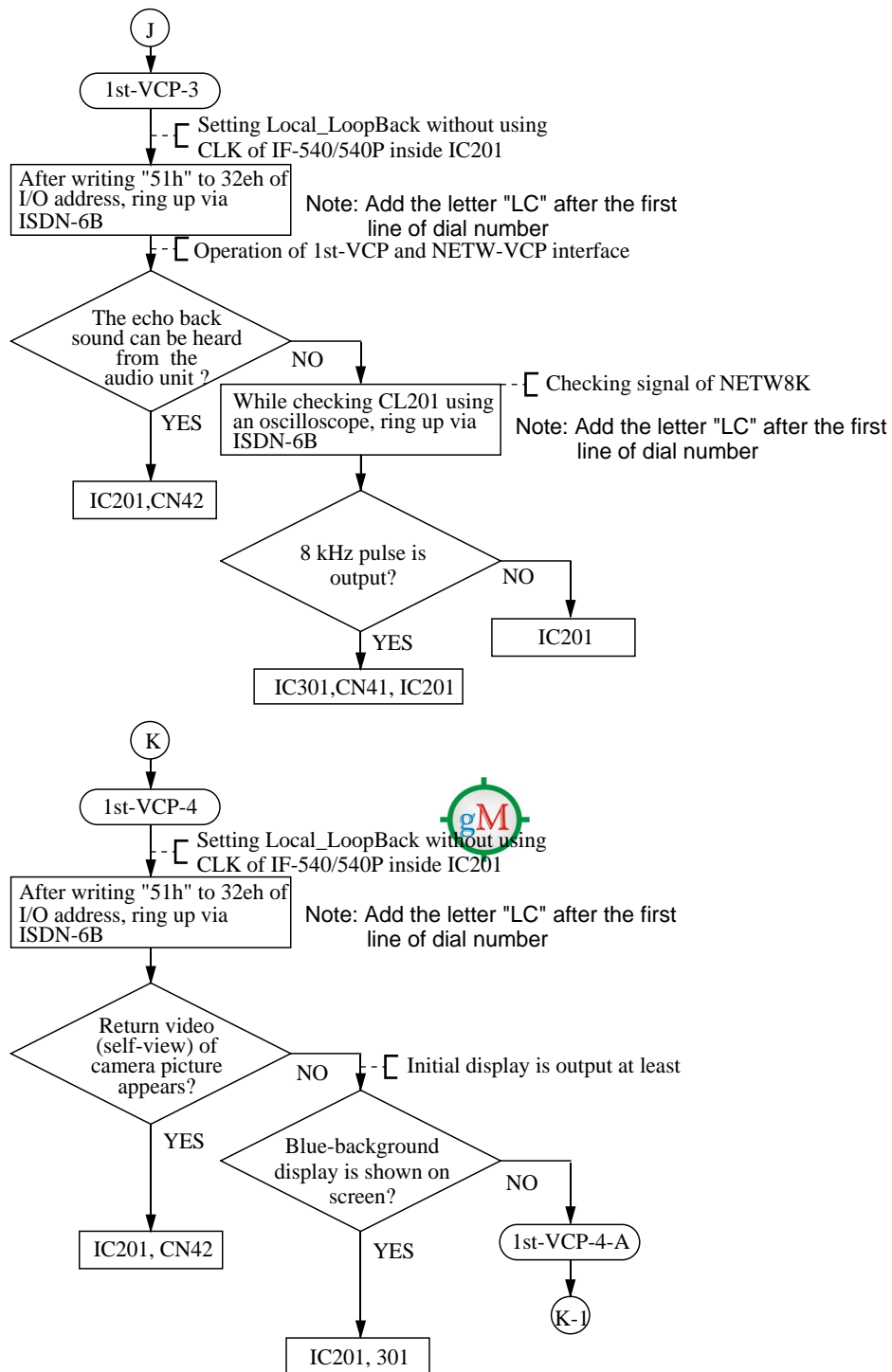


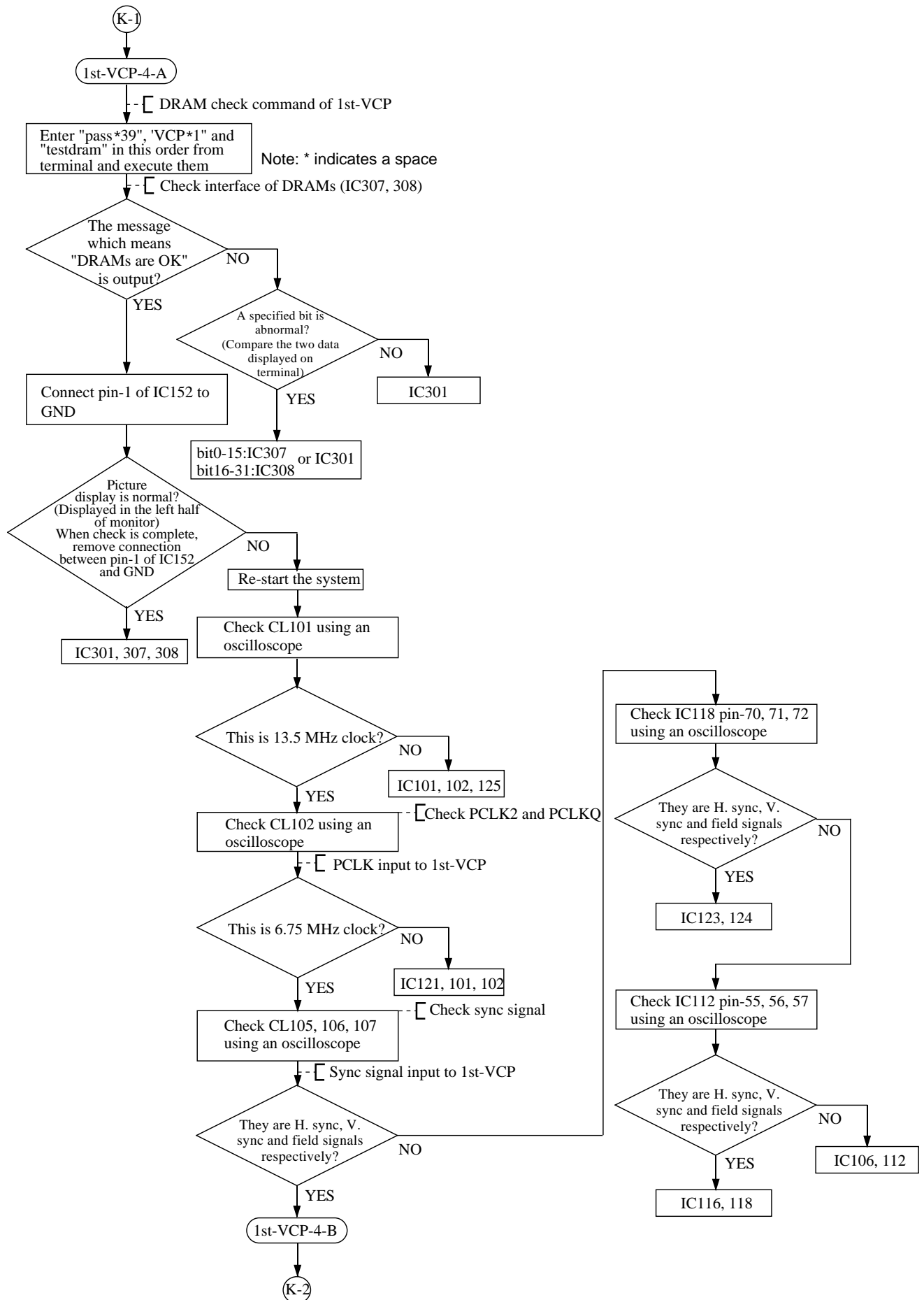


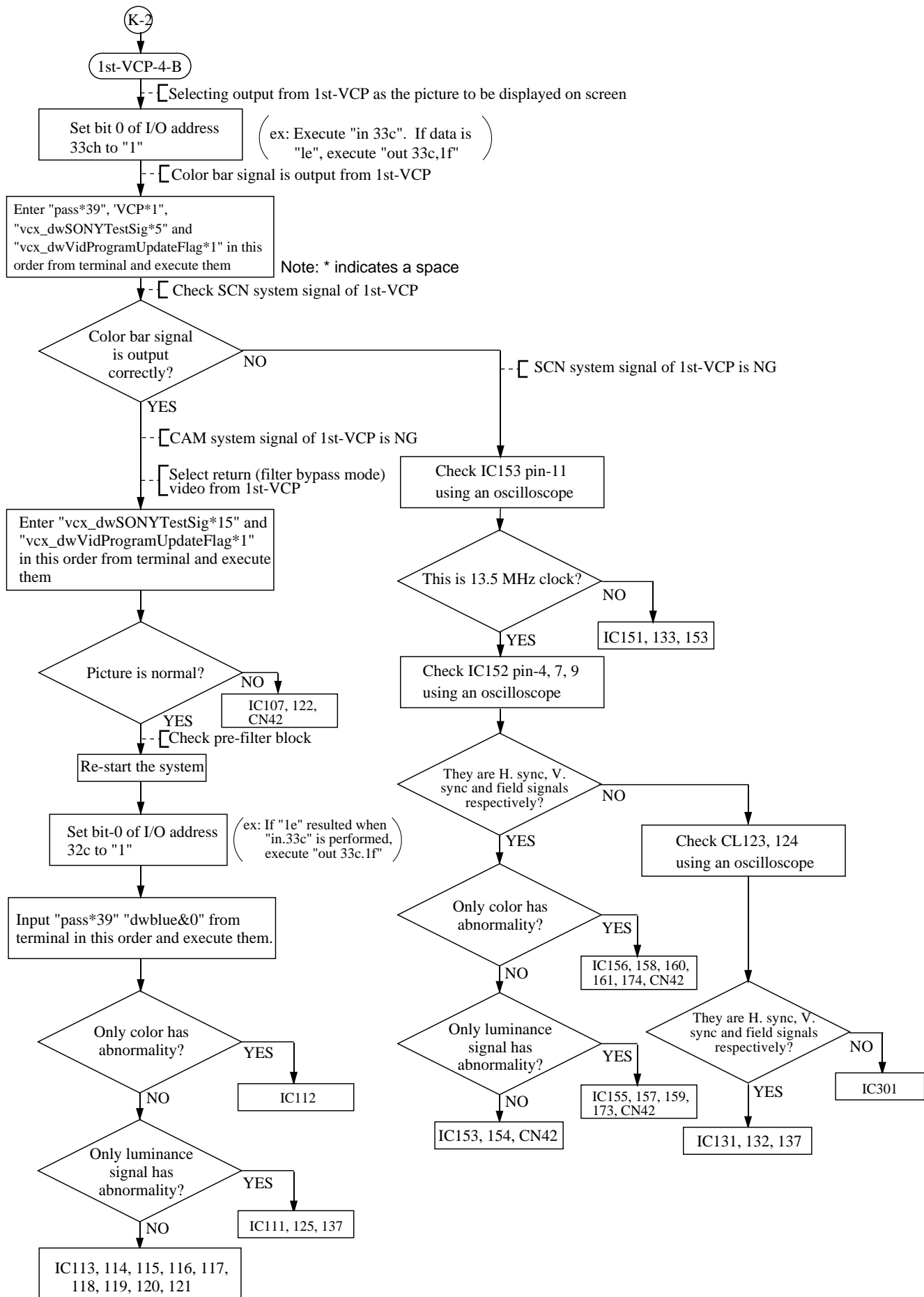


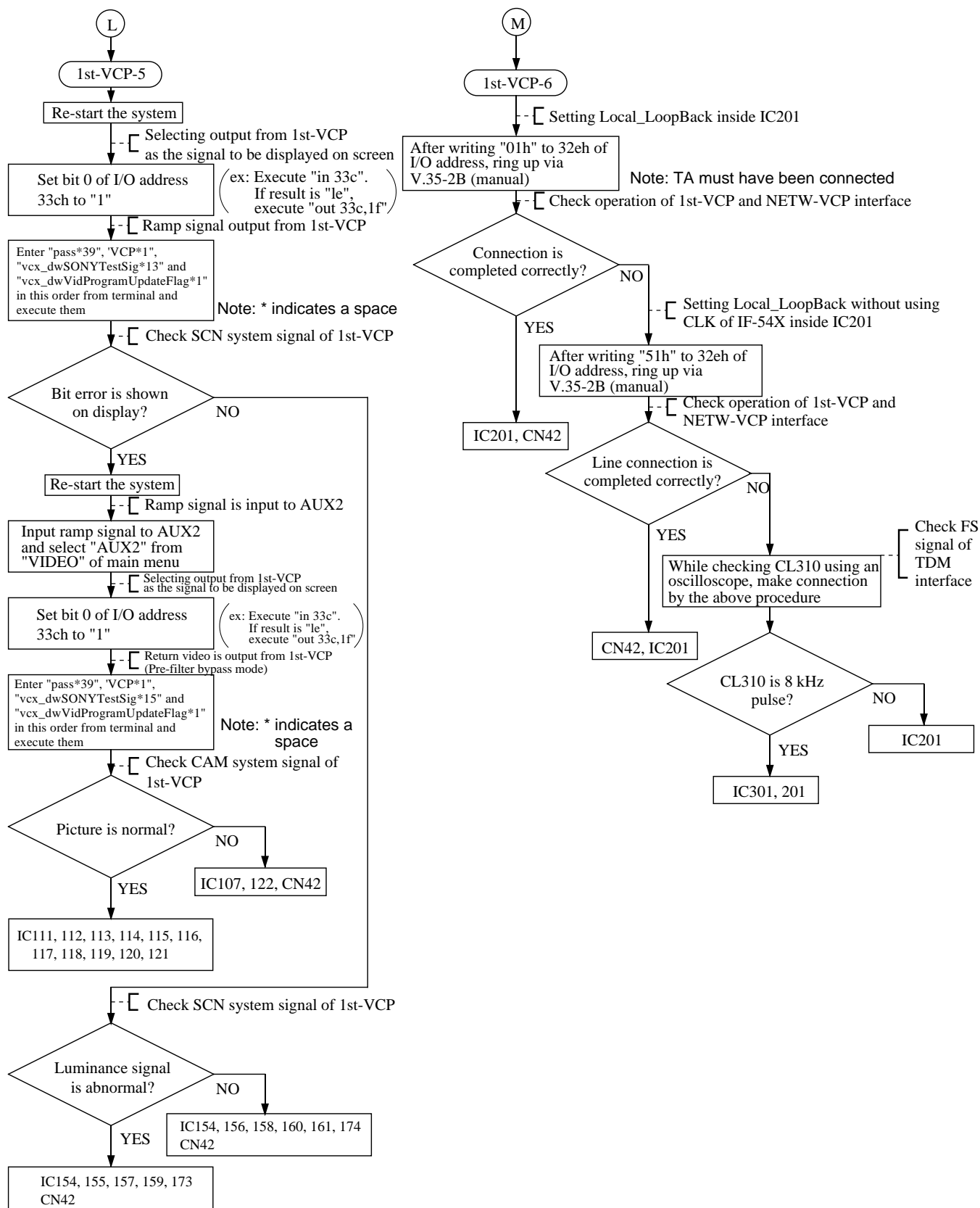


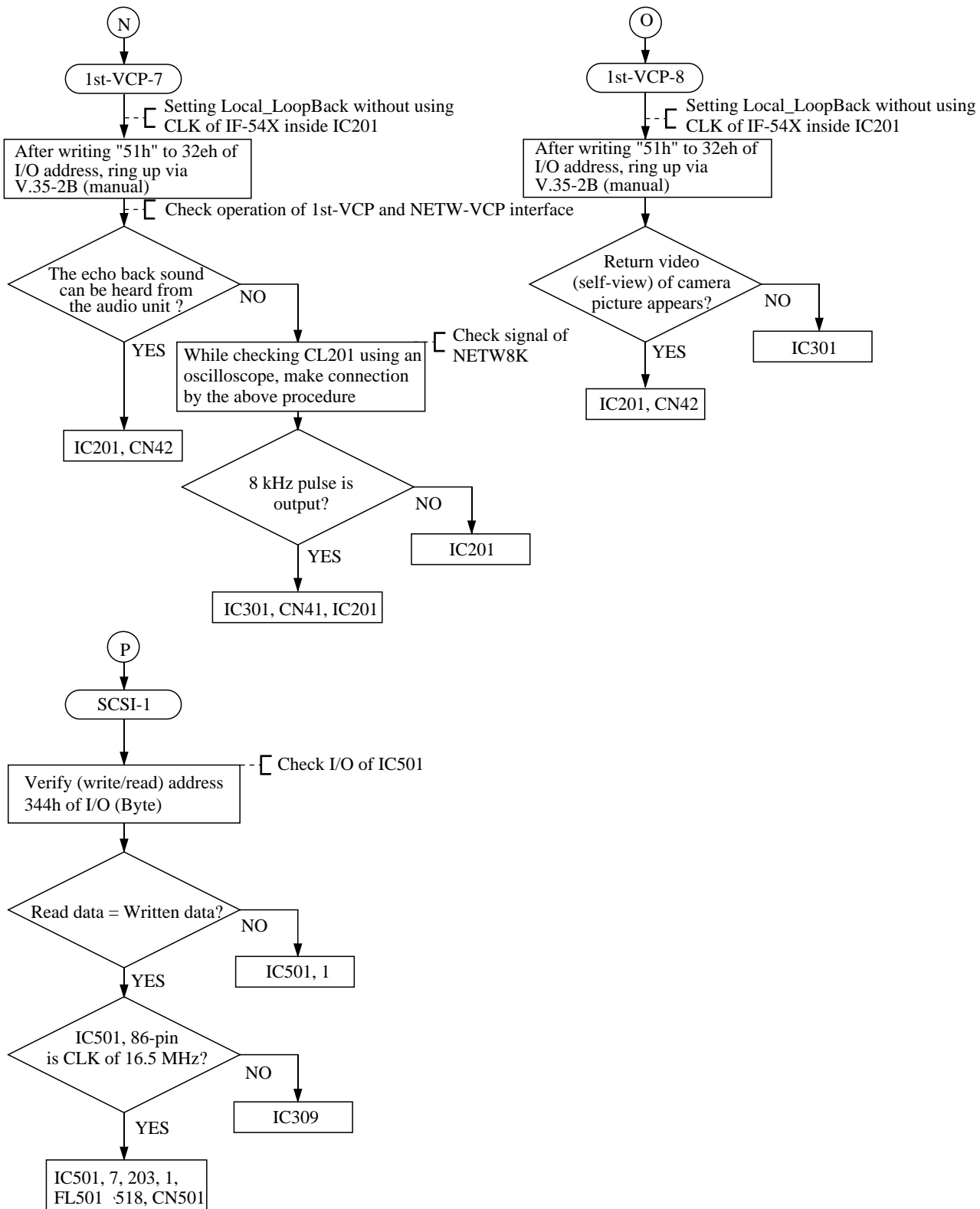


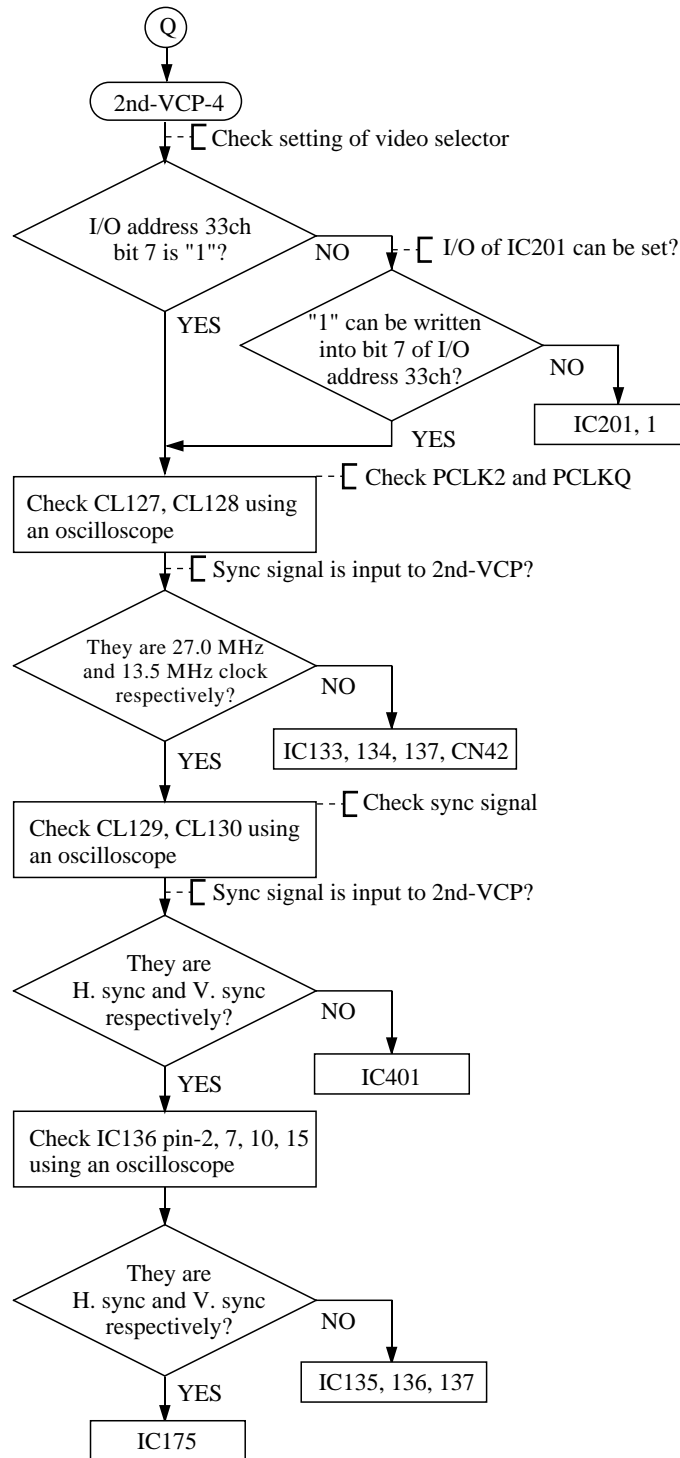


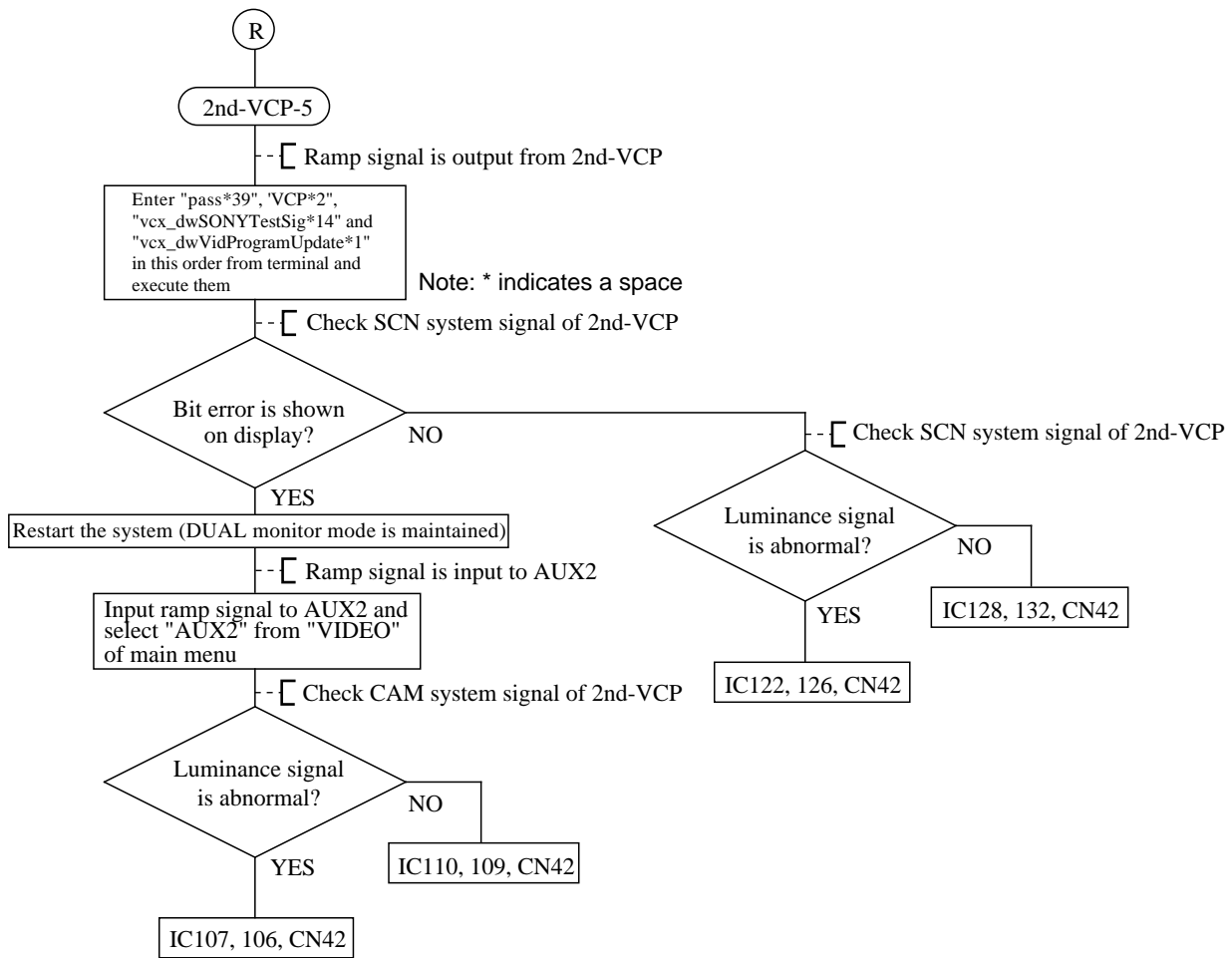












3-7-6. A/D Converter Block (schematic diagram 4/9, 5/9)

The respective analog signals which are converted to the Y, U and V signals, are passed through the low-pass filters (FL3, FL4, FL5) for the purpose of the returned anti-aliasing, video amplifier and sent to CXD1176 (IC12, IC16, IC19) where they are A/D converted (8 bits).

Because the CXD1176 has the clamp function, a feedback clamp can be readily constituted by connecting a comparator (IC13) and analog switch (IC14) externally so that the blanking level is clamped to the specified value. The clamp level is 10 H for the Y signal and 80 H for the U and V signals in terms of digital value.

The sampling frequency is 13.5 MHz for Y signal and 6.75 MHz for U and V signals. The U and V signals are multiplexed (IC53, IC54, IC55, IC56) in terms of time division after A/D conversion, so that they are multiplexed into a 13.5 MHz, 8-bit signal.

Because the sampling frequency is different in Y signal, and U/V signals, the low-pass filters before A/D conversion are different too. As the result, a delay is resulted between the Y signal and U/V signals. The delay is minimized by passing through the digitized Y signal only through the shift register (IC51). The respective signals are passed through CN2 and output to the VPR-019 board.

The digital values after A/D conversion conform to the ITU-R601 specification. The reference digital values (in hexadecimal value) are shown below when the reference color bar signal is input.

COLOR BAR DIGITAL VALUE

	75% COLOR BAR WITH SETUP			75% COLOR BAR WITHOUT SETUP			100% COLOR BAR WITHOUT SETUP		
	Y	B-Y	R-Y	Y	B-Y	R-Y	Y	B-Y	R-Y
WHITE	B8	80	80	B4	80	80	EB	80	80
YELLOW	A7	32	8D	A1	2C	8E	D2	10	92
CYAN	8B	9A	32	83	9C	2C	A9	A6	10
GREEN	7A	4D	3F	70	48	3A	90	36	22
MAGENTA	5F	B3	C1	54	B8	C6	6B	CA	DE
RED	4E	66	CE	41	64	D4	52	5A	F0
BLUE	32	CE	73	23	D4	72	29	F0	6E
BLACK	20	80	80	10	80	80	10	80	80

3-7-7. Sync System (Output Side) (schematic diagram 6/9)

The sync system of the output side has two modes.

One is the A/D-D/A bypass mode in which the input signal bypasses the circuit in the board. (Diagnostics use only) In this case, the sync and clock signals which are used by the input side sync system block, are used.

The other mode is the normal (normal operation) mode. Firstly the clock (27 MHz) is generated (X6) on free running in this board, and is input to the digital video encoder CXD1913Q (IC18) where 27 MHz is divided by two and the 13.5 MHz clock is output. Both of these clock signals are sent to the VPR-019 board and are used as the reference of all sync systems in the output side. The VPR-019 board generates the horizontal sync signal, vertical sync signal and field identification signal using this clock as the reference. These generated signal are returned to the DAD-017/017P board where the sync timing signal for the encoder IC CXD1913Q is generated (IC78, IC79, IC80, IC81) using the returned signals as the reference, and the video signal which is synchronized with the sync signal generated by the VPR-019 board, is output.

The output side has the IC μ PD65641-188 (IC83) which generates menu display data. This IC is locked to the input side sync system in the A/D-D/A bypass mode, and is locked to the output side sync system in the normal operation mode, in synchronous with the sync system of the parent display.

3-7-8. Menu Signal Generator Block (schematic diagram 8/9)

All of the menu display signals are generated by μ PD65641-188 (IC83) and its associated external memory CXK581000/LC361000 (IC84, IC85) which are controlled by the CPU-202 board via bus line. The output signal from these ICs is added to the output video signal from the DAD-017/017P board, and is output to the DAD-018/018P/DAD-33/33P board (PCS-G500/G500P/PCS-G510/G510P).

The menu signal output from μ PD65641-188 are the 4-bit data for Y, U and V which are output in synchronous with the 13.5 MHz clock. Among them, the U and V signals are reduced to 1/2 by IC86 so that the signals conform with the other video signal formats, and multiplexed in time division into a single 4-bit signal by IC87 and IC88. The Y signal is shifted by IC89 in order to match the delay. The respective 4-bit signals are added into the upper 4 bits of the 8-bit signal at the selectors (IC64 to IC71) of the video signal. The YS signal which generates the timing for multiplexing the menu signal is shifted by IC88 to match the delay with the Y and U/V signals, and is output to IC103 which controls the output signal selectors (IC64 to IC71).

3-7-9. Encoder and D/A Converter Block (schematic diagram 6/9)

Video encoding and D/A conversion are performed by CXD1913Q (IC18).

The four signals of the input signal from the VPR-019 board, the input signal from A/D converter, the blanking black level and menu signal, are input to the selectors (IC64 to IC71) as the 8-bit digital video signal of Y and U/V data. The signal which is selected at the selectors (IC64 to IC71) and multiplexed, is input to CXD1913Q (IC18). This selector is controlled by IC103 (Programmable Logic Device) to which the I/O (IC102) output, the menu YS signal and blanking signal are input and decoded. 27 MHz signal is input as the clock signal for the video encoder IC. The horizontal, vertical sync signals and the field identification signal which are generated by the VPR-019 board, are input as the sync signal so that encoding is performed.

Parameter setting such as output signal format and field polarity and others are performed by CXP5068H-242Q (IC17) using the serial interface.

The digitally encoded signal is converted to analog Y and C signals by the D/A converter, and output.

3-7-10. Video Signal Output Block (schematic diagram 7/9)

The D/A converted Y and C signals are passed through the low-pass filters for anti-aliasing. Both low-pass filters have the same characteristics.

The respective signals are output to external devices as the MONITOR OUT, through video amplifier, 75 Ω driver, etc. At the same time, both signals are mixed and the composite signal is generated. The composite signal is output to external devices as the AUX OUT, through video amplifier, 75 Ω driver, etc.

3-7-11. Decoder and Encoder Control Block (schematic diagram 6/9)

The video decoder (MC44011) and the video encoder (CXD1913Q) are controlled (setting the internal parameters) by the 4-bit microprocessor CXP5068H-242Q (IC17). Among the terminals of this IC, the ports which are used by the internal software are described as follows.

NAME	PIN	I/O	FUNCTION
PA0	60	I	Selection of encoder IC H: CXD1910Q, L: CXD1913Q
PB0	64	I	Setting of V sync delay of decoder IC in NTSC H: 68us, L: 36us
PB1	1	I	Setting of V sync delay of decoder IC in PAL H: 36us, L: 68us
PB2	2	I	Setting of blanking period of encoder IC H: All input data is passed through. L: The input data is ignored and black level is generated. Alternately, amplitude exceeding Y: 10H to EBH, UV: 10H to F0H are limited even outside the blanking period
PB3	3	I	Setting of chroma phase adjustment mode inside the decoder IC H: Phase is adjusted by HUE of the decoder block. L: Phase is adjusted by the subcarrier balance of the chroma PLL block.
PC0	12	I	Chroma phase adjustment input for decoder PC0: LSB, PC3: MSB
PC1	13	I	
PC2	14	I	
PC3	15	I	
PD0	16	O	Encoder serial interface: data output
PD1	17	O	Encoder serial interface: data clock output
PD2	18	O	Encoder serial interface: chip-select output
PE0	4	I	V SYNC INPUT ACTIVE LOW
PE1	5	I	H: NTSC, L: PAL
PE2	6	I	VCO inside the decoder IC oscillation ON/OFF, H: ON, L: OFF
PE3	7	I	D/A converter output of encoder IC ON/OFF, H: ON, L: OFF (BLANKING)

3-7-12. CPU Interface (schematic diagram 9/9)

The CPU interface accesses the menu display IC μ PD65641GD-188 (IC83) and the parallel I/O IC μ PD71055 (IC102). Address bus is input through the buffers (IC91, IC92, IC93). The data bus is input and output using latches (IC95, IC96, IC97 and IC98). The bit width of data is 16-bit for the menu display IC, and 8-bit for the parallel I/O IC. Input/output control of the data latch and address decode of the menu IC are performed by IC99 (Programmable Logic Device).

3-7-13. Parallel I/O (schematic diagram 9/9)

The CPU board reads and sets the status of the DAD-018/018P, DAD-33/33P boards through the CPU interface using the parallel I/O IC μ PD71055 (IC102). The items which can be set and read, are shown below.

- Input switching of either DAD-017/017P board or DAD-018/018P boards.
- Setting the mode in which the output signal of the DAD-017/017P board is returned to input for bypass.
- Setting which of the DAD-017/017P or DAD-018/018P/DAD-33/33P outputs is used for menu display.
- Blanking the output signal of the DAD-017/017P, DAD-018/018P and DAD-33/33P boards.
- Setting the A/D-D/A bypass mode of the DAD-017/017P, DAD-018/018P and DAD-33/33P boards.
- Setting which of the Y/C or RGB signal is used for input signal to the DAD-018/018P board.
- Reading if any signal is input to the DAD-017/017P board or not.
- Reading the VGA input mode of the DAD-018/018P/DAD-33/33P boards.
- Reading if installation is performed or not in the DAD-018/018P/DAD-33/33P boards.

Various setups are normally performed by this IC. However, if bit 8 of the DIP switch (S2) is set to on, the various setups can be performed by the DIP switches (S1, S2).

Actual I/O address, description of each bit and contents of DIP switches settings are shown as follows.

Name of each bit of the I/O corresponds to the name of each bit which controls the selector shown in Fig. 3-7-1.

DAD-017/017P Board I/O Map Table

Address: 2A0H (DAD017/017P CNT)

DAD017/017P Control

IC102 μ PD71055 port 0



Bit	R/W	Signal	Description
0	R/W	IM SEL1	(SEL2, EL1): Select Main Video (DAD-017/017P) Source (0, 0): CAMUNIT; (0, 1): OBJECT; (1, 0): AUX1; (1, 1): AUX2
1	R/W	IM SEL2	
2	R/W	IG SEL1	(SEL2, EL1): Select Graph. Video (DAD-018/018P) Source (0, 0): CAM UNIT; (0, 1): OBJECT; (1, 0): AUX1; (1, 1): AUX2
3	R/W	IG SEL2	
4	R/W	SET OMBYP	0: Bypass Main Video OUT to Main Video IN; 1: Normal
5	R/W	YS SEL	0: YS for Graph. Video OUT; 1: YS for Main Video OUT
6	R/W	SET MBLK	0: Main Video OUT Blanking; 1: Normal
7	R/W	SET IMBYP	0: Set AD to DA Bypass (DAD-017/017P); 1: Normal

Address: 2A2H (Menu Reset & DAD018/018P/DAD33/33P CNT)

Menu Reset & DAD018/018P/DAD33/33P Control

IC102 μ PD71055 port 1

Bit	R/W	Signal	Description
0	R/W	MO RESET	Reset Menu Gen. IC 1: Reset
1	R/W	Not Use	
2	R/W	Not Use	
3	R/W	Not Use	
4	R/W	I SEL	Select Graph. (DAD-018/018P/DAD-33/33P) Source 0 : RGB IN, 1 : VIDEO IN (DAD-018/018P), NO INPUT (DAD-33/33P)
5	R/W	Not Use	
6	R/W	SET IGBYP	0: Set AD to DA Bypass (DAD-018/018P/DAD-33/33P); 1: Normal
7	R/W	SET GBLK	0: Graph. (DAD-018/018P/DAD-33/33P) OUT Blanking; 1: Normal

Address: 2A4H (DAD017/017P & 018/018P, 33/33P STS)

DAD017/017P Status

IC102 μ PD71055 port 2

Bit	R/W	Signal	Description
0	R	NTSC/PAL	0: PAL Mode; 1: NTSC Mode
1	R	MSYNC LOST	0: NO Main Video (DAD-017/017P) Input
2	R	VBL	0: V Blanking (Menu)
3	R	DAD Ver.	0: Ver.1; 1: Ver.2
4	R	G SYNC LOST	0: NO INPUT (DAD-018/018P/DAD-33/33P)
5	R	VGA TYP	0: VGA IN 480 Line; 1: etc. (DAD-018/018P) 0: VGA ; 1: SVGA (DAD-33/33P)
6	R	SENSE018	0: DAD-018/018P/DAD-33/33P Exist; 1: DAD-018/018P/DAD-33/33P not Exist
7	R	Not Use	

Address: 2A6H (PIO CNT)

PIO Mode Control

IC102 μ PD71055 Command REG

Set 1000 100lb (89H)

DAD-017/017P DIP SW. SET UP

S1

NO.	FUNCTION	MODE (L = ON, H = OFF)			
1	DAD-017/017P	L: "CAMERA	H: "GRAPH-	L: "AUX1"	H: "AUX2"
2	INPUT VIDEO SELECT	L: UNIT"	L: ICS"	H:	H:
3	DAD-018/018P	L: "CAMERA	H: "GRAPH-	L: "AUX1"	H: "AUX2"
4	INPUT VIDEO SELECT	L: "UNIT"	L: "ICS"	H:	H:
5	DAD-017/017P OUT TO IN BYP	L: ON		H: OFF(NORMAL)	
6	MENU DISPLAY SELECT	L: DAD-018/018P/DAD-33/33P OUTPUT		H: DAD-017/017P OUTPUT	
7	DAD-017/017P OUTPUT BLANK	L: BLANKING		H: NORMAL	
8	DAD-017/017P AD-DA BYPASS	L: BYPASS MODE		H: NORMAL MODE	

S2

NO.	FUNCTION	MODE (L = ON, H = OFF)	
1	NTSC/PAL	L: NTSC	H: PAL
2	DAD-018/018P, DAD-33 IN VIDEO/RGB	L: RGB INPUT	H: VIDEO INPUT (DAD-018/018P) NO INPUT (DAD-33/33P)
3	_____	SET H	
4	DAD-018/018P/DAD-33/33P AD-DA BYPASS	L: BYPASS MODE	H: NORMAL MODE
5	DAD-018/018P/DAD-33/33P OUTPUT BLANK	L: BLANKING	H: NORMAL
6	_____	SET H	
7	_____	SET H	
8	MODE SET DEVICE	L: DIP SW(S1, S2)	H: μ PD71055(IC102)

Initial setting

S2-1: ON (For NTSC), OFF (For PAL)

S1, S2-2~8: OFF

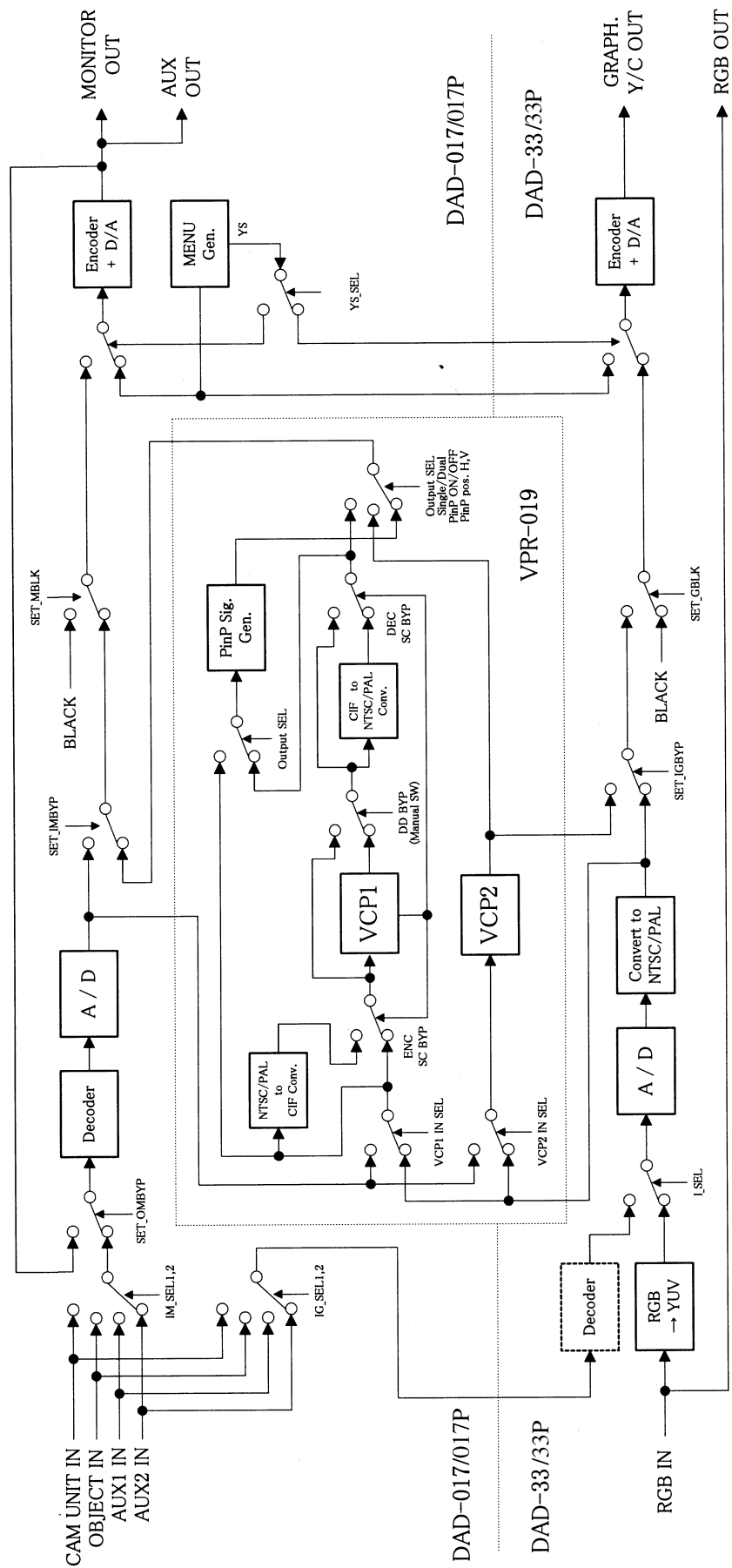


Fig. 3-7-1 PCS-P500/P500P VIDEO SIGNAL FLOW (with control bit)

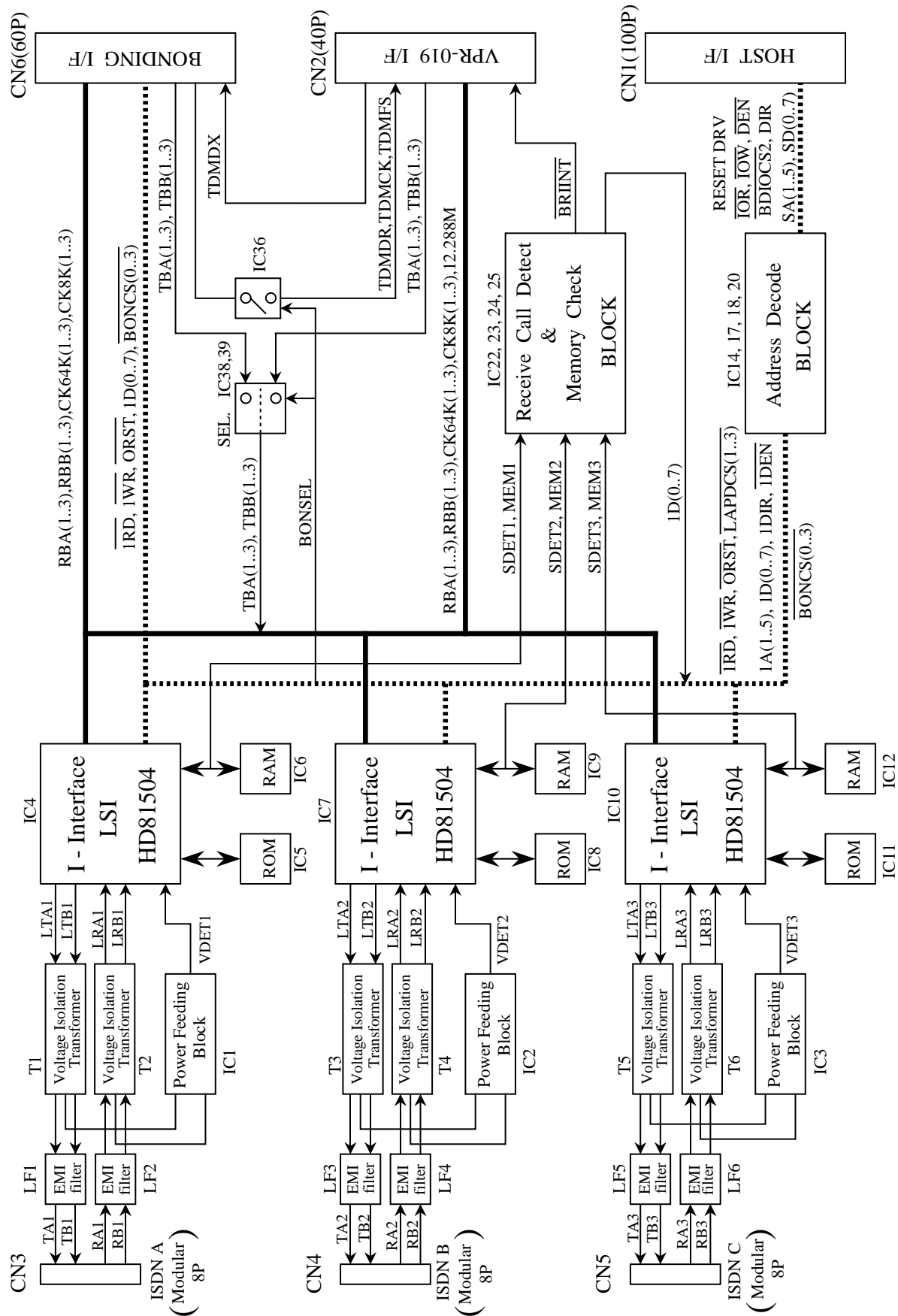


Fig. 3-11-1 IF-540/540P Board Block Diagram

3-12. IF-540/540P BOARD TROUBLESHOOTING

When any error occurs in the IF-540/540P board, use the flowchart as shown to locate the cause of the trouble.

[Equipment required]

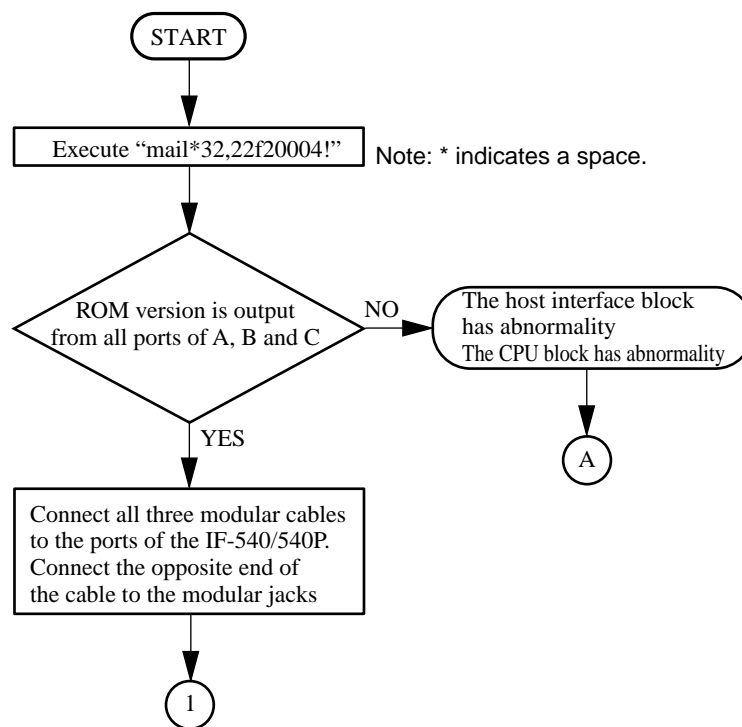
- PCS-5100/5100P system
 - (Rollabout processor (PCS-P500/P500P)
 - (Camera unit (PCS-C300/C300P)
 - (Audio unit (PCS-A500/A510)
 - (Remote commander (PCS-R500)
- Oscilloscope
- Video monitor
- Camera unit connection cable (supplied accessory)
- Audio unit connection cable (supplied accessory)

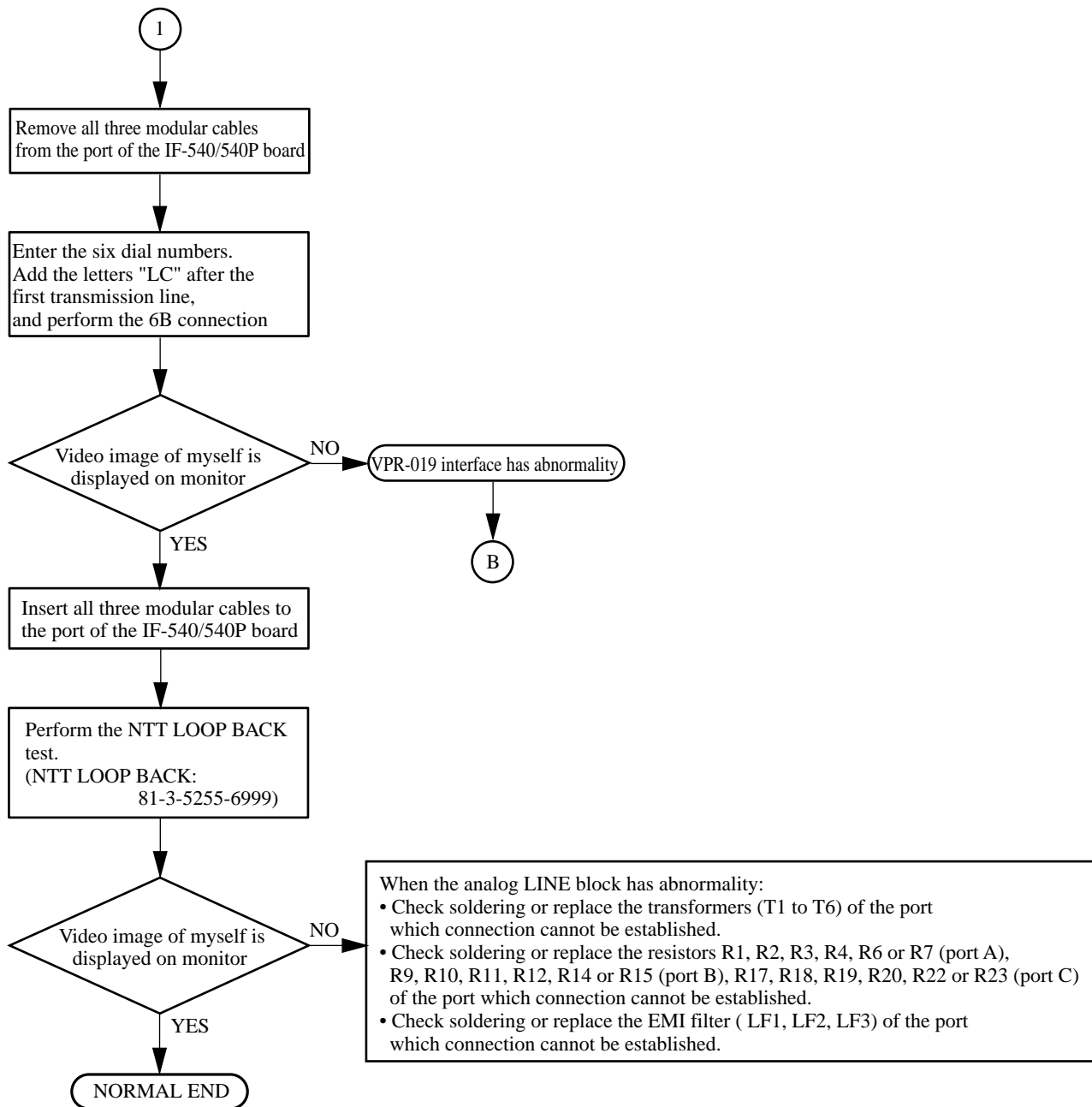
[Service tools]

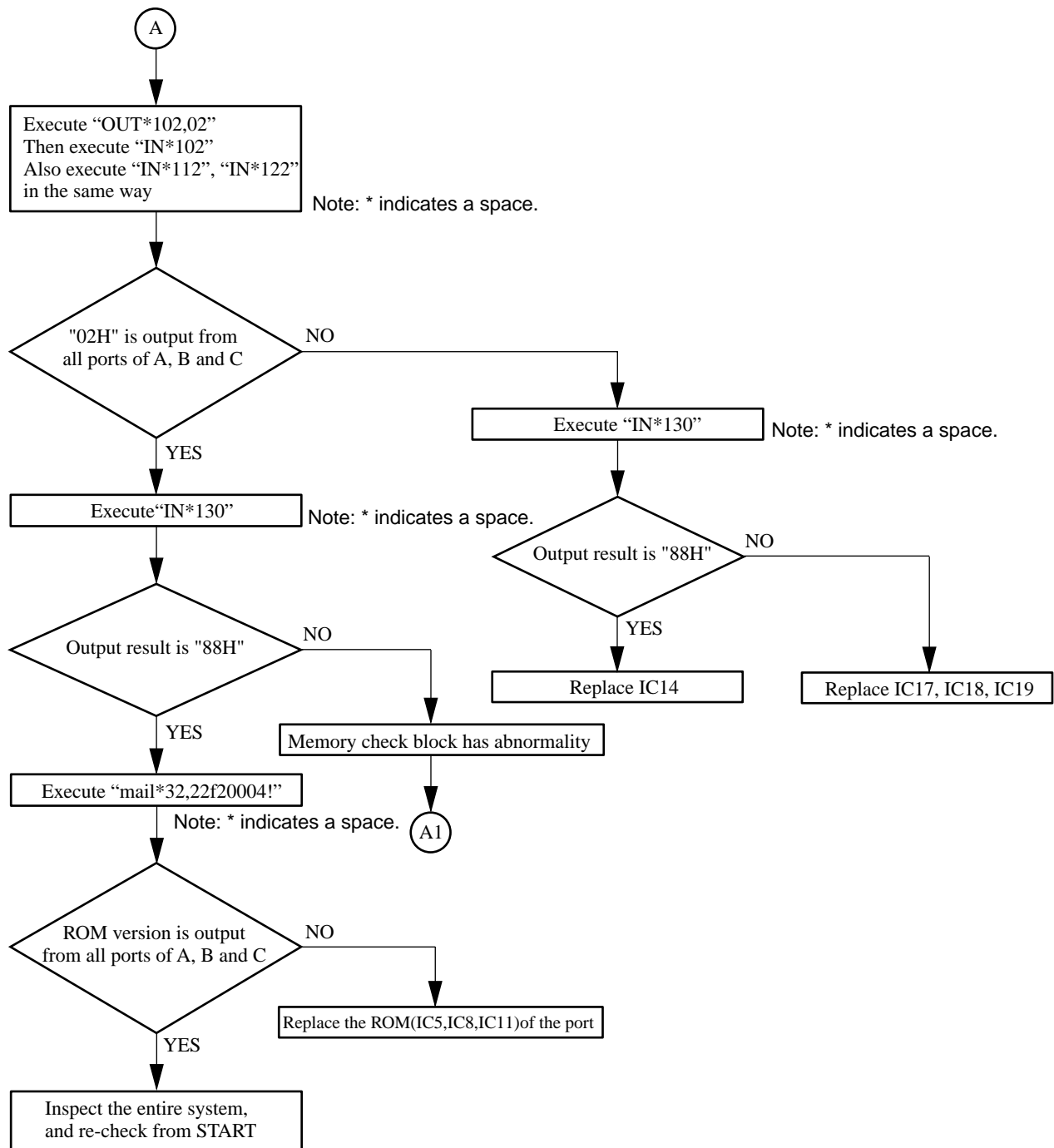
- VH-951 extension board (Sony part number: J-6389-951-A)
- RS-232C terminal (PC/AT compatible with communication software “CCT”)
- RS-232C cross cable
- S cable
- ISDN (8P) modular cable

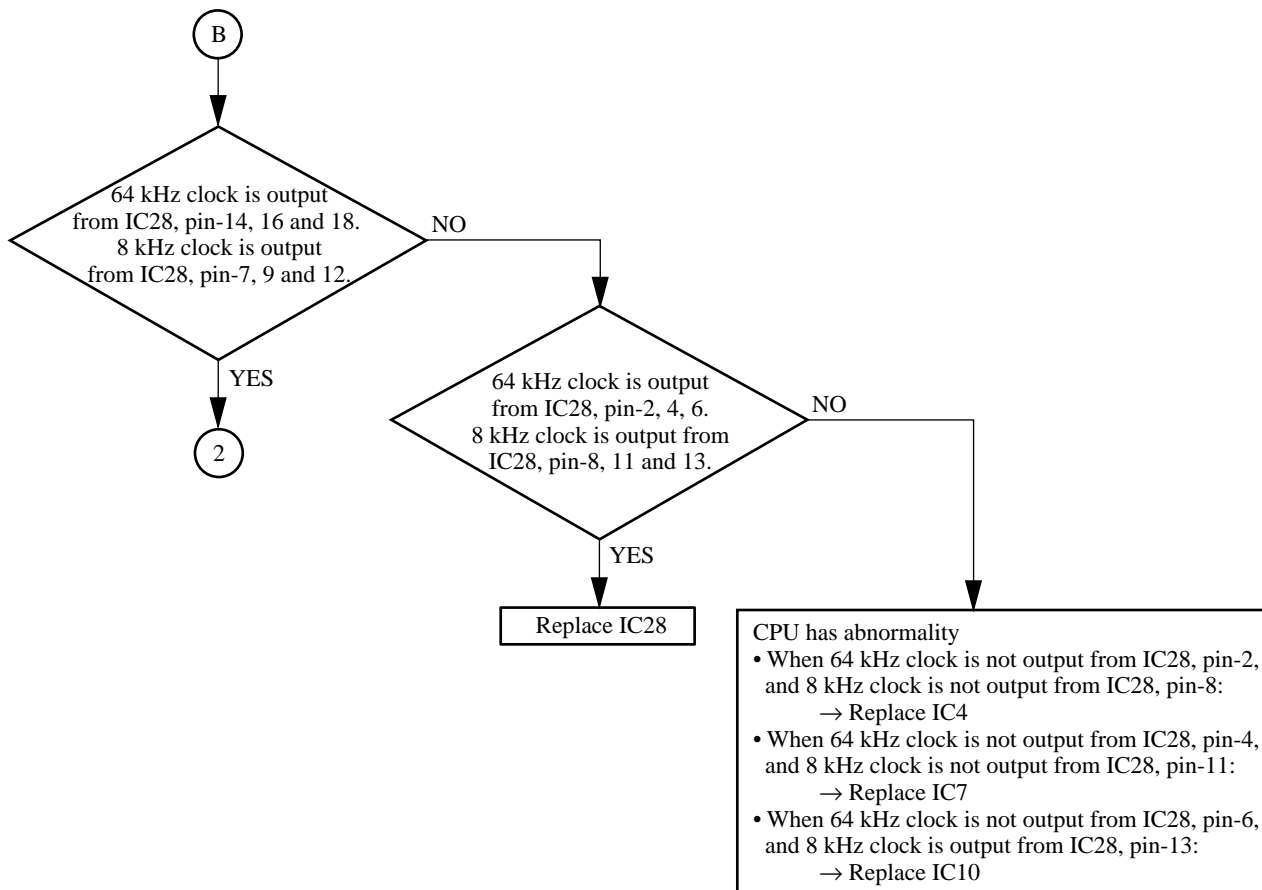
[Preparation]

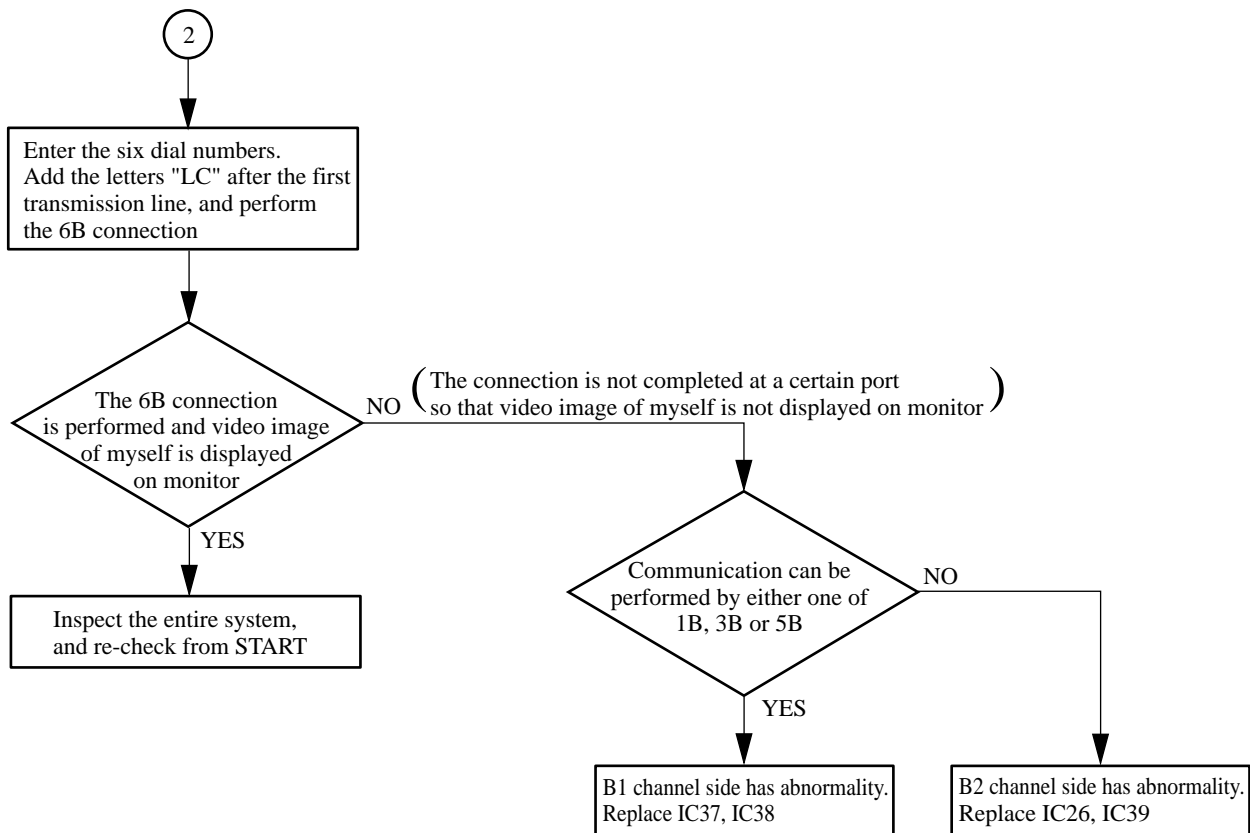
- 1) Set up the PCS-5100/5100P system to the normal operating condition.
- 2) Insert the extension board to the slot of the IF-540/540P board.
- 3) Insert the IF-540/540P board to the extension board.
- 4) Connect the video monitor to the VIDEO OUT MONITOR terminal of the rollabout processor (PCS-P500/P500P).
- 5) Connect the RS-232C terminal (to be abbreviated simply as terminal hereafter) to the AUX CONTROL terminal of the rollabout processor (PCS-P500/P500P).
- 6) Remove all ISDN (8 pins) modular cables. The modular cables to use must be assured of good performance.
- 7) Start up the communication software “CCT” which is installed in the terminal. Turn on the main power of the PCS-5100/5100P system (enter the debug mode).
- 8) Turn on the main power from the remote commander (PCS-R500).





1. Host interface block or CPU block has abnormality

2. VPR-019 interface has abnormality

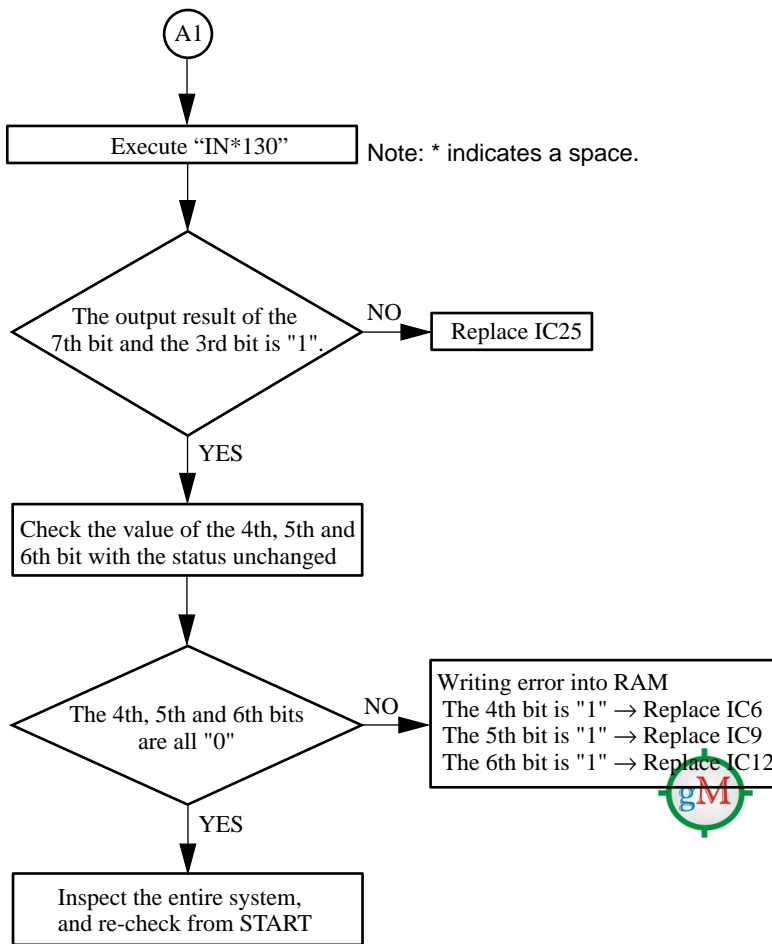


Note: The following output is supplied from PC:

"IF_MGR> cur_state=BRI:0 0 0 0 0 0 X21:0 0 V35:0 0 RS:0 BON:0"

Regarding BRI, communication status of the respective channels are indicated by 1B, 2B, 3B, 4B, 5B and 6B in the order from left.

The channel status is "0" when communication is not performed. The channel status is "10" when communication is performed.



3-13. OUTLINE OF IF-541 BOARD OPERATION

[System Outline]

The IF-541 board enables connection between the PCS-P500/P500P and a terminal adapter (TA) complying with the ITU-T standard X.21 specifications. The PCS-P500/P500P can be connected to the ISDN line via TA. The IF-541 board operates on the physical conditions of using a 15 pin connector, the connection procedure in compliance with the ITU-T standard X.21 and the electrical conditions in compliance with the ITU-T standard V.11. The IF-541 board has the function of call control (connection and disconnection control to line) with TA. When a connection is established, the send signal is routed to the TA while the receive signal is routed to the VPR-019 board where video and audio signals are multiplexed/demultiplexed. The line speed of a port is either 56 or 64 kbps which corresponds to 1B of the BRI. Therefore, the IF-541 board uses 2 (dual) ports when connected to the ISDN line via TA. It uses one port when connected to the high speed system H0 (384 kbps) via TA. It uses one port when using the channel aggregation (transfer speed of 56 to 384 kbps) which is an inter-channel multiplexing system. The IF-541 board consists of the driver/receiver block, sync detection block, CPU block, terminating call detection block, send signal selector block, loop back block and host interface block.

Functions of the respective blocks are described as follows:

1) Driver/receiver block

The receiver consists of IC28 and IC29 which converts the balanced analog data having V.11 characteristics to the digital signal of TTL level. The driver is IC30 which converts the TTL signal to the balanced analog data.

2) Sync detection block

The sync detection block consists of IC1 to IC8. When TA calls the IF-541 board, the TA board sends the sync signal (SYN) to the IF-541 board. When the sync signal is detected, the IF-541 board sends the interrupt signal to the CPU.

3) CPU block

The CPU block consists of IC9, IC10 and IC11. IC9 performs call control with TA according to X.21 procedure, and communication control with the host CPU. IC10 stores firmware regarding the call control.

4) Terminating call detection block

When a terminating call is connected from a network, the IF-541 board outputs the interrupt signal of terminating call detection, to the VPR-019 board. The interrupt signal is used as trigger activating the POWER ON operation of processor. A host processor can confirm the port number to which the terminating call is made.

5) Send signal selector block

The X.21 system uses the send signal line for both control signal and the data. The send signal line is used for sending and receiving the control signal between the TA and CPU when a terminal issues a call and the call control is performed with the TA. The send signal line is used for data send and receive after the call control is completed. This selection is performed by IC33 and IC34.

6) Loop back block

The IF-541 board has the two types of loop backs: one is the local loop back to transmit the send signal to the receive signal line, and the other is the remote loop back to transmit the receive signal to the send signal. The loop backs are used to check the defective boards.

7) Host interface block

The host interface block transfers the control signal between the host CPU and the CPU of the IF-541 board.

[I/O port map]

The IF-54X (X = 1, 2, 3) board uses the address from 0210H to 024FH. The port map for the address is shown below.

Address	Name	Details	IN / OUT
0240 H	OPTST	Option status	(I)
0242 H	OPCNF	Option config	(O)
0244 H	OPRST#	Option reset	(I)
0246 H	OPSDCLR#	OPSDDET [1, 2] clear	(I)
0248 H	IFINX	I/F Inport for X.21	(I)
024A H	IFOUT	I/F Outport for X.21	(O)
024C H	IFINRS	I/F Inport RS-449	(I)
024E H	IFOUTRS	I/F Outport RS-449	(O)
0210 H	IFINV1	I/F Inport V.35-1	(I)
0212 H	IFINV2	I/F Inport V.35-2	(I)
0214 H	IFOUTV1	I/F Outport V.35-1	(O)
0216 H	IFOUTV2	I/F Outport V.35-2	(O)
0218 H		not use	
021A H		not use	
021C H		not use	
021E H		not use	
0220 H		not use	
0222 H		not use	
0224 H		not use	
0226 H		not use	
0228 H		not use	
022A H		not use	
022C H		not use	
022E H		not use	
0230 H		not use	
0232 H		not use	
0234 H		not use	
0236 H		not use	
0238 H		not use	
023A H		not use	
023C H		not use	
023E H		not use	

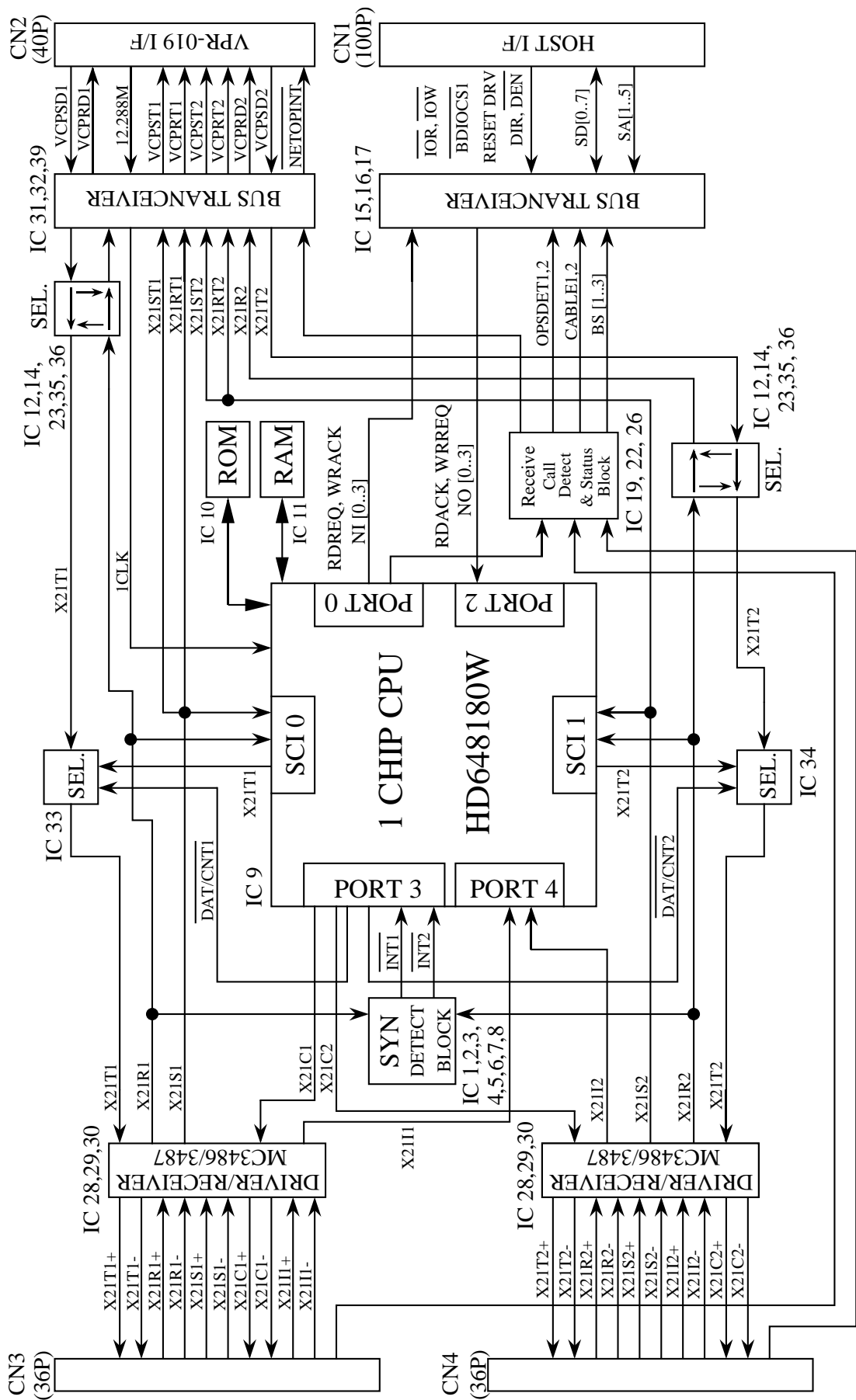


Fig. 3-13-1 IF-541 Board Block Diagram

3-14. IF-541 BOARD TROUBLESHOOTING

When any error occurs in the IF-541 board, use the flowchart as shown to locate the cause of the trouble.

[Equipment required]

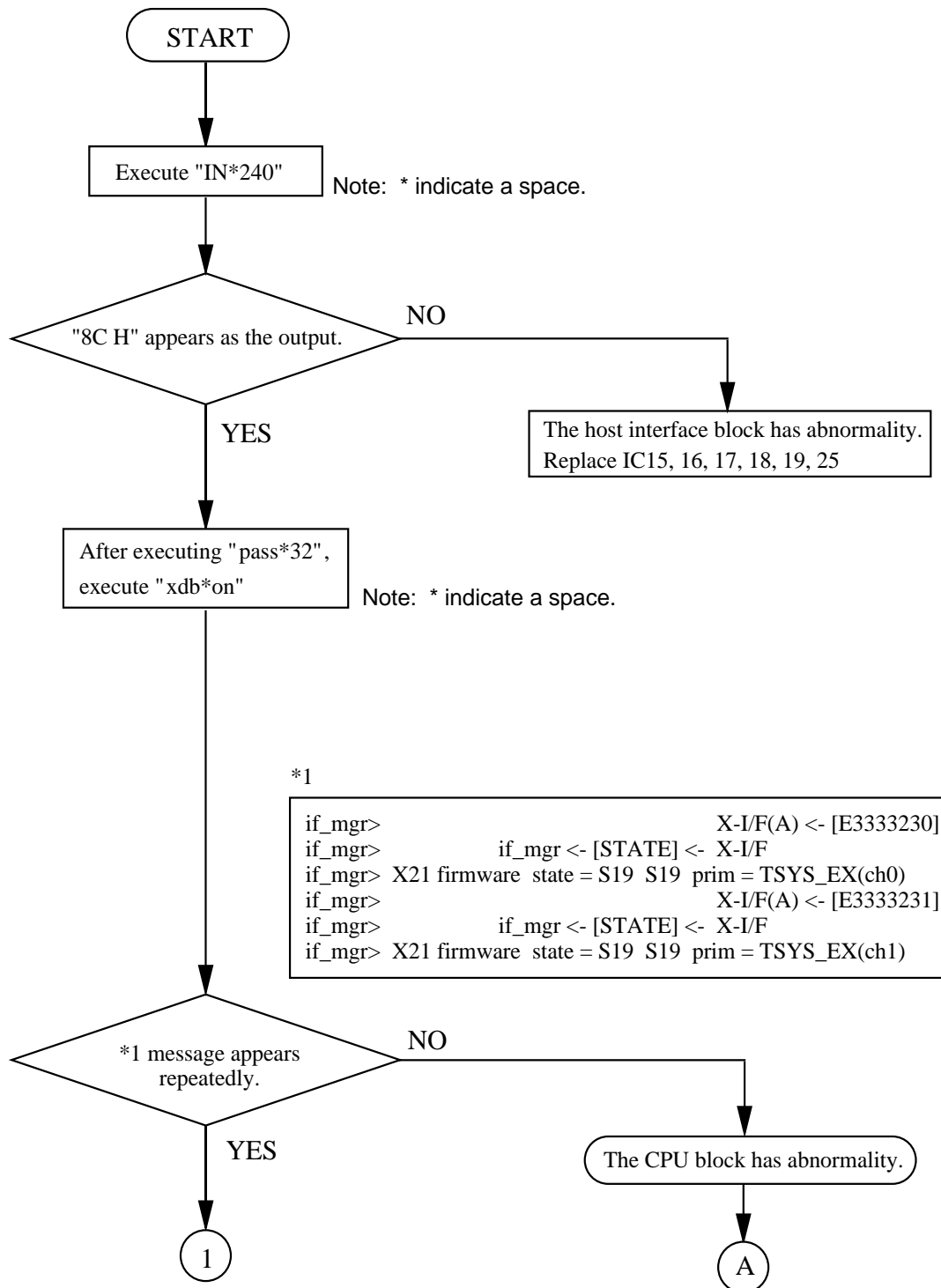
- PCS-5100/5100P system
 - Rollabout processor (PCS-P500/P500P)
 - Camera unit (PCS-C300/C300P)
 - Audio unit (PCS-A500/A510)
 - Remote commander (PCS-R500)
- Oscilloscope
- Video monitor
- Camera unit connection cable (supplied accessory)
- Audio unit connection cable (supplied accessory)

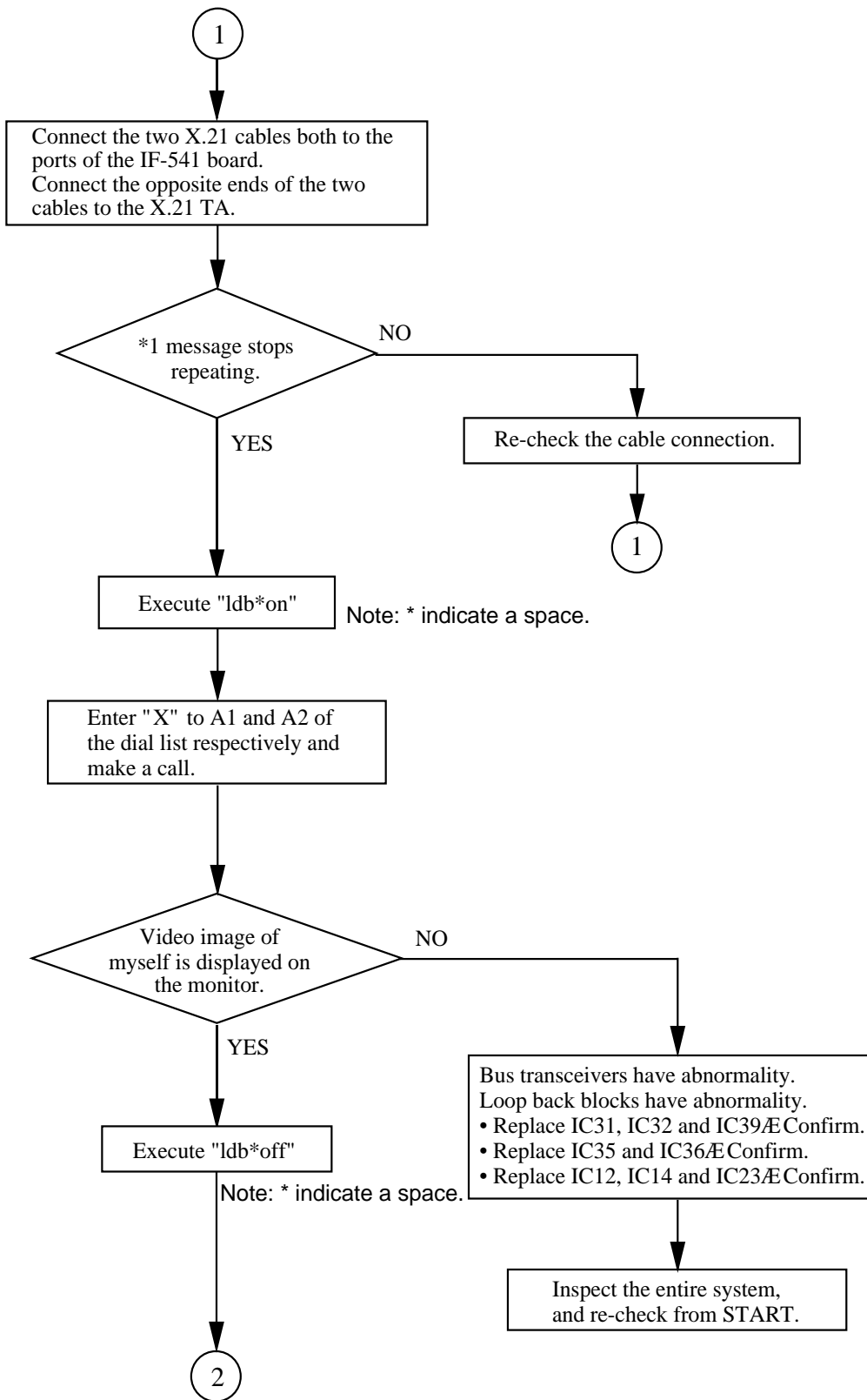
[Service tools]

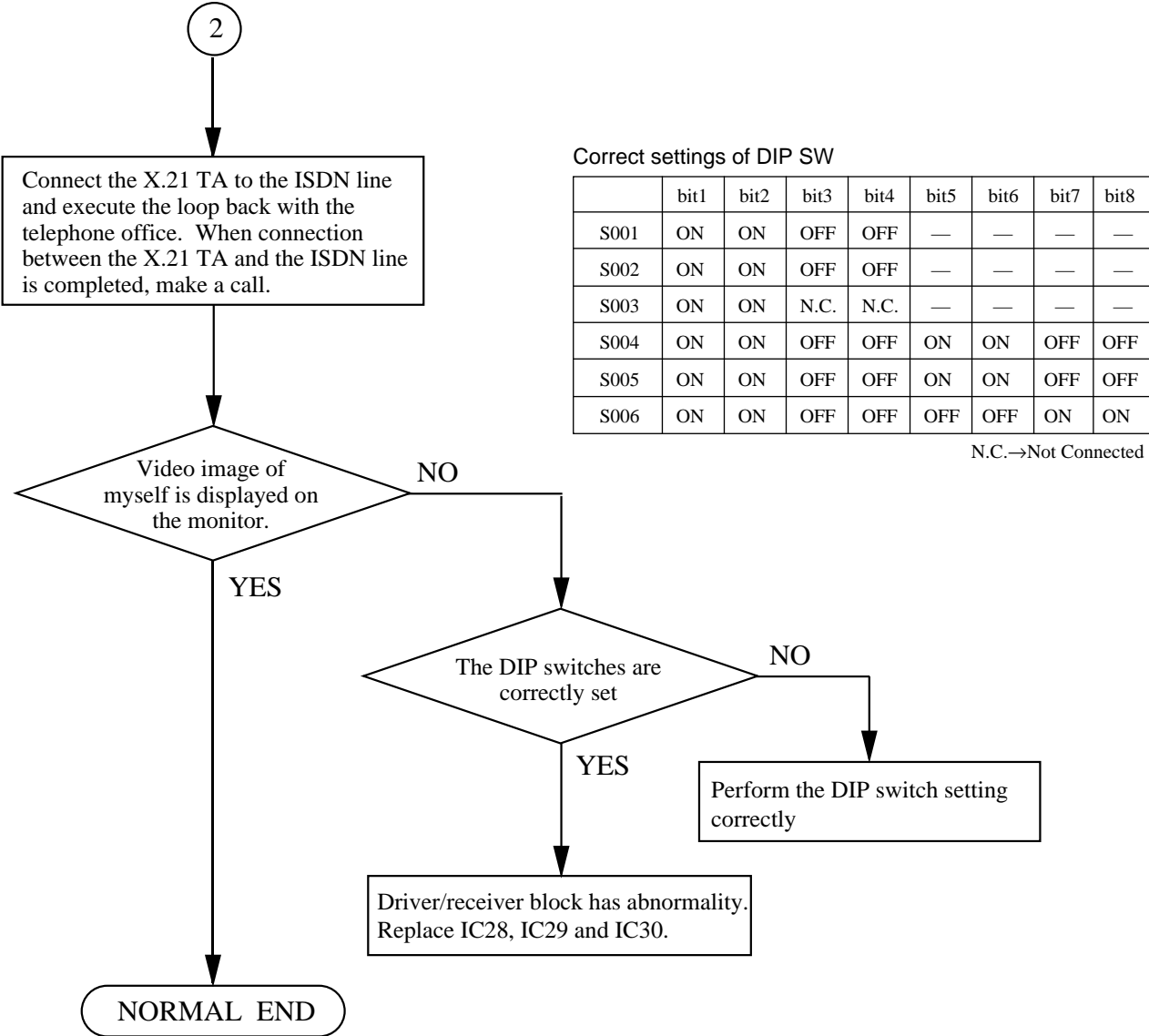
- VH-951 extension board (Sony part number: J-6389-951-A)
- RS-232C terminal (PC/AT compatible with communication software “CCT”)
- RS-232C cross cable
- S cable
- X.21 cable (PCS-K70)
- X.21 terminal adapter (TA)
- ISDN (8P) modular cable

[Preparation]

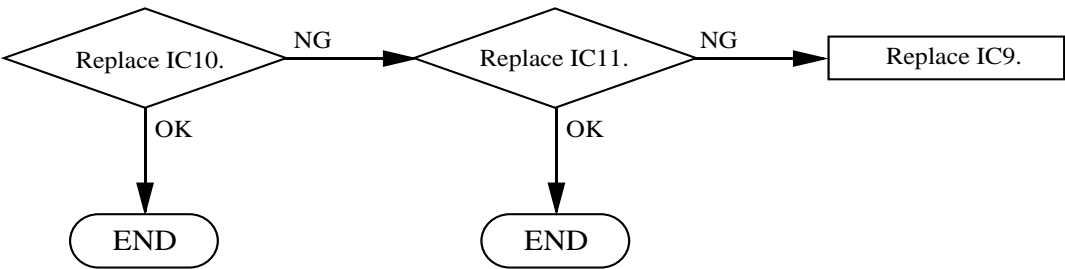
- 1) Set up the PCS-5100/5100P system to the normal operating condition.
- 2) Insert the extension board to the slot of the IF-541 board.
- 3) Insert the IF-541 board to the extension board.
- 4) Connect the video monitor to the VIDEO OUT MONITOR terminal of the rollabout processor (PCS-P500/P500P).
- 5) Connect the RS-232C terminal (to be abbreviated simply as terminal hereafter) to the AUX CONTROL terminal of the rollabout processor (PCS-P500/P500P).
- 6) Remove all X.21 cables. The X.21 cable to use must be assured of good performance.
- 7) Start up the communication software “CCT” which is installed in the terminal. Turn on the main power of the PCS-5100/5100P system (enter the debug mode).
- 8) Turn on the main power from the remote commander (PCS-R500).







1. CPU block has abnormality.



3-15. OUTLINE OF IF-542 BOARD OPERATION

[System Outline]

The IF-542 board enables connection between the PCS-P500/P500P and a terminal adapter (TA) complying with the ITU-T standard V.35 specifications. The PCS-P500/P500P can be connected to the ISDN line via TA. The IF-542 board operates on the physical conditions of using an ISO standard 34-pin connector, the connection procedure in compliance with the ITU-T standard V.35 and the electrical conditions in compliance with the ITU-T standards V.35 and V.28. The IF-542 board has the function of call control (connection and disconnection control to line) with TA. When a connection is established, the send signal is routed to the TA while the receive signal is routed to the VPR-019 board where video and audio signals are multiplexed/demultiplexed. The connection procedure of EIA standard RS-366 is used. The line speed of a port is either 56 or 64 kbps which corresponds to 1B of the BRI. Therefore, the IF-542 board uses 2 (dual) ports when connected to the ISDN line via TA. It uses one port when connected to the high speed system H0 (384 kbps) via TA. It uses one port when using the channel aggregation (transfer speed of 56 to 384 kbps) which is an inter-channel multiplexing system. The IF-542 board consists of the driver/receiver block, terminating call detection block and host interface block.

Functions of the respective blocks are described as follows:

1) Driver/receiver block

The driver/receiver of the V.35 signal is IC2 and IC3 that convert the analog balanced data having the V.35 characteristics and being supplied from TA, to the digital signal of TTL level. It also converts the digital signal of TTL level to the analog data of balanced type. The driver/receiver of the RS-366 (V.28 characteristics) signal is IC7 to IC10 and IC13 to IC16 that convert the analog unbalanced data having the V.28 characteristics to the TTL level signal. In addition, IC2 and IC3 have the loop-back function.

2) Terminating call detection block

When a terminating call is connected from a network, the IF-542 board outputs the interrupt signal of terminating call detection, to the VPR-019 board. The interrupt signal is used as trigger activating the POWER ON operation of processor. A host processor can confirm the port number to which the terminating call is made.

3) Host interface block

The host interface block transfers the V.35 and RS-366 control signals between the host CPU and the CPU of the IF-542 board.

[I/O port map]

The IF-54X (X = 1, 2, 3) board uses the address from 0210H to 024FH. The port map for the address is shown below.

Address	Name	Details	IN / OUT
0240 H	OPTST	Option status	(I)
0242 H	OPCNF	Option config	(O)
0244 H	OPRST#	Option reset	(I)
0246 H	OPSDCLR#	OPSDET [1, 2] clear	(I)
0248 H	IFINX	I/F Inport for X.21	(I)
024A H	IFOUT	I/F Outport for X.21	(O)
024C H	IFINRS	I/F Inport RS-449	(I)
024E H	IFOUTRS	I/F Outport RS-449	(O)
0210 H	IFINV1	I/F Inport V.35-1	(I)
0212 H	IFINV2	I/F Inport V.35-2	(I)
0214 H	IFOUTV1	I/F Outport V.35-1	(O)
0216 H	IFOUTV2	I/F Outport V.35-2	(O)
0218 H		not use	
021A H		not use	
021C H		not use	
021E H		not use	
0220 H		not use	
0222 H		not use	
0224 H		not use	
0226 H		not use	
0228 H		not use	
022A H		not use	
022C H		not use	
022E H		not use	
0230 H		not use	
0232 H		not use	
0234 H		not use	
0236 H		not use	
0238 H		not use	
023A H		not use	
023C H		not use	
023E H		not use	

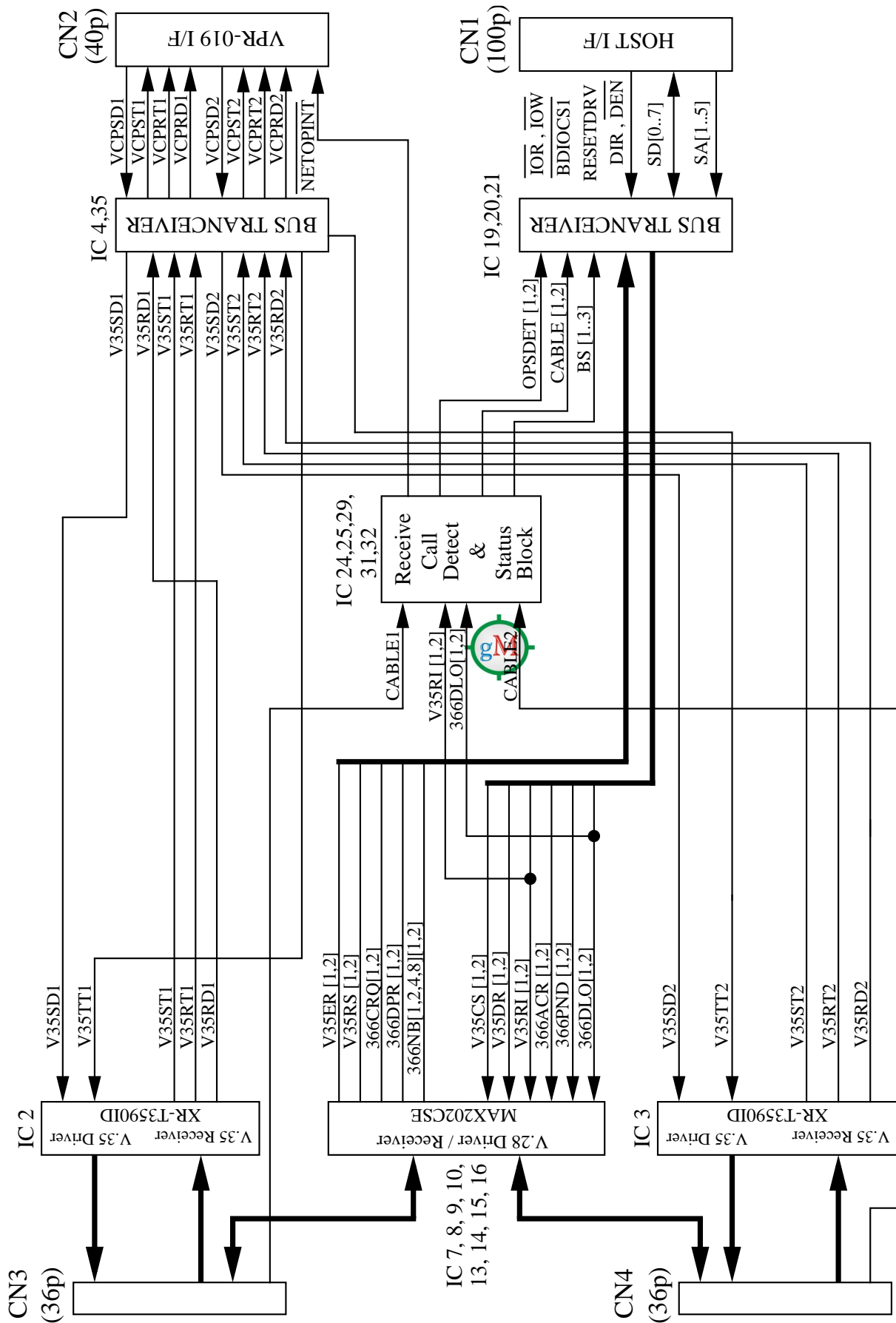


Fig. 3-15-1 IF-542 Board Block Diagram

3-16. IF-542 BOARD TROUBLESHOOTING

When any error occurs in the IF-542 board, use the flowchart as shown to locate the cause of the trouble.

[Equipment required]

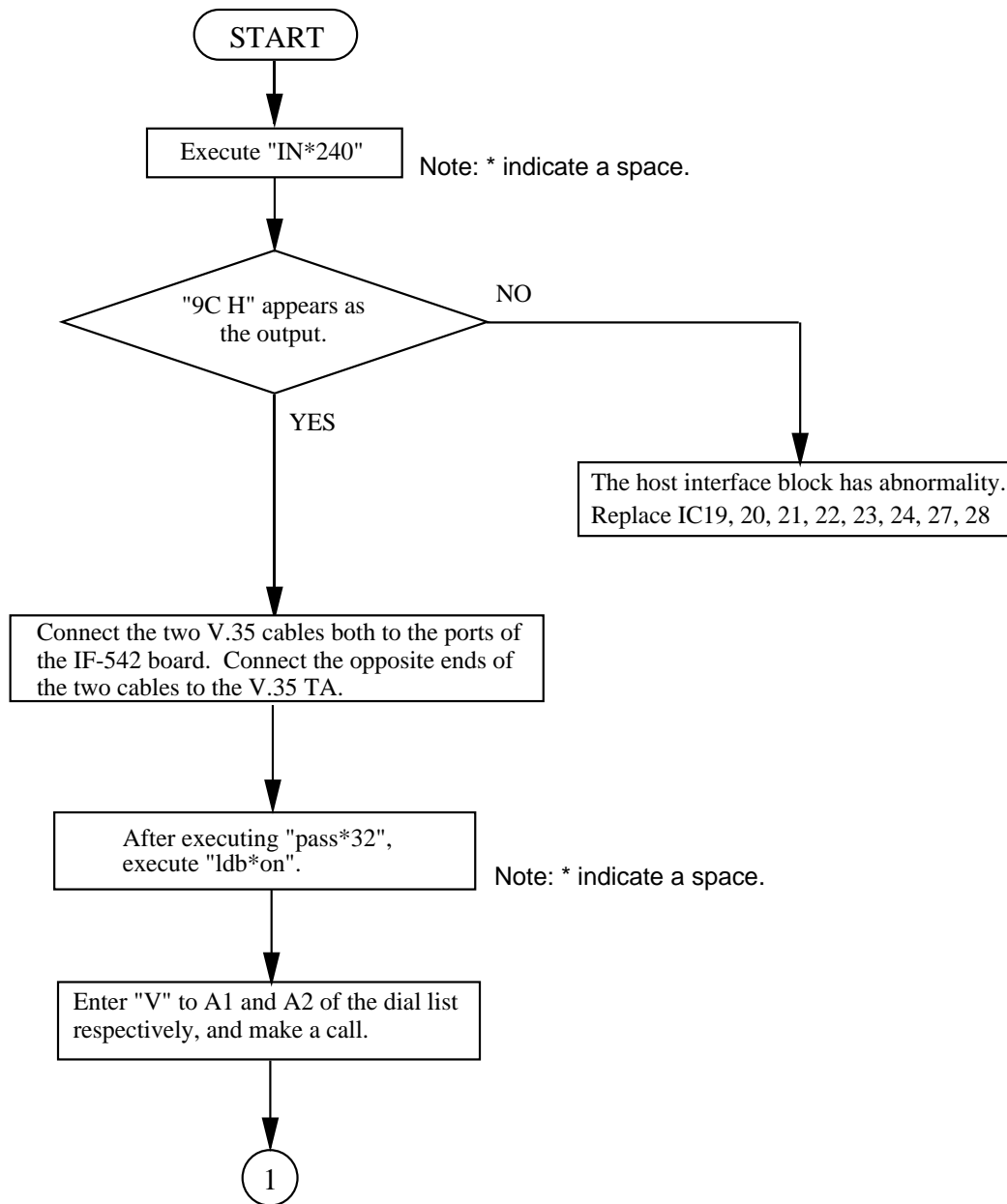
- PCS-5100/5100P system
 - Rollabout processor (PCS-P500/P500P)
 - Camera unit (PCS-C300/C300P)
 - Audio unit (PCS-A500/A510)
 - Remote commander (PCS-R500)
- Oscilloscope
- Video monitor
- Camera unit connection cable (supplied accessory)
- Audio unit connection cable (supplied accessory)

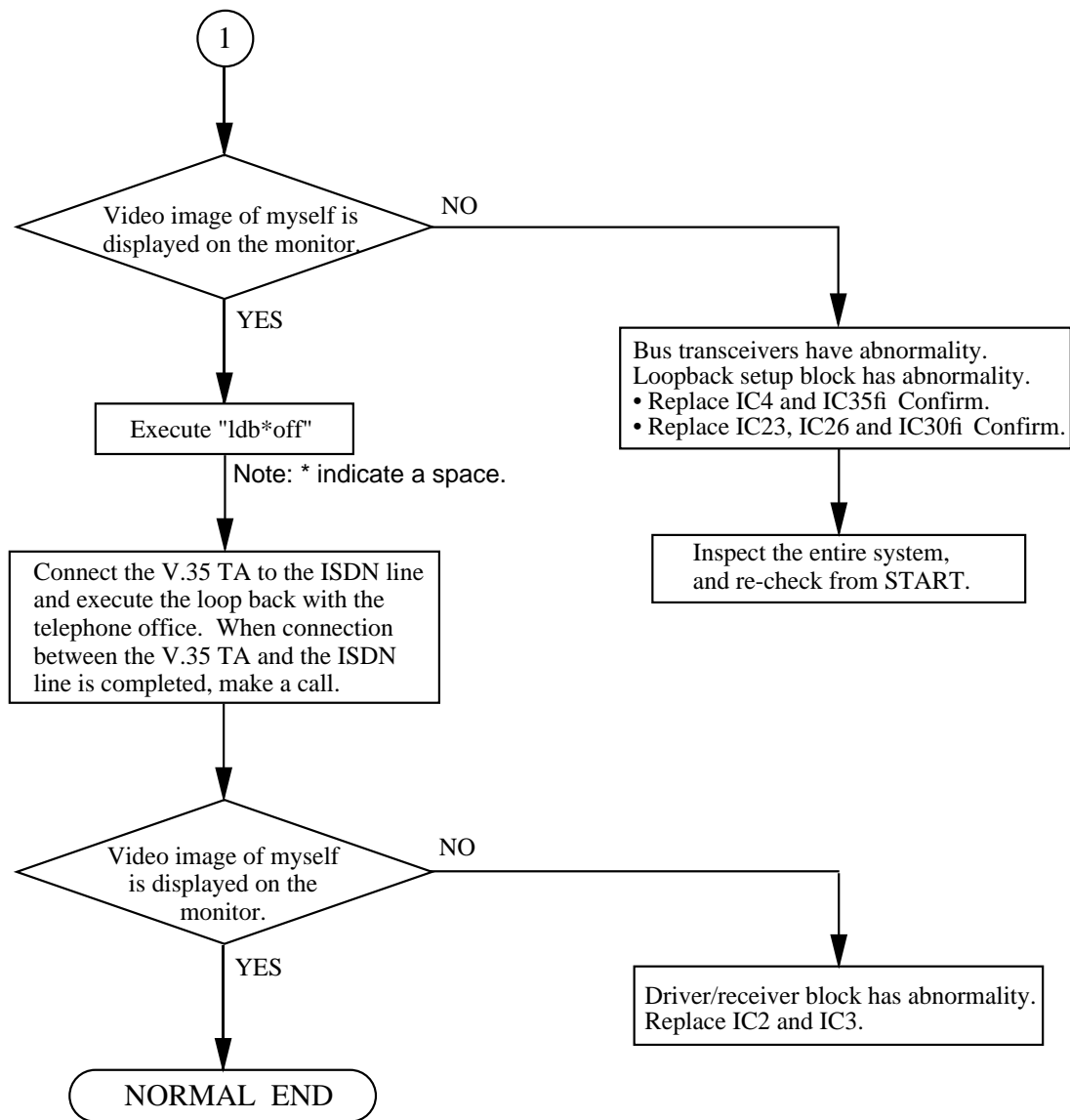
[Service tools]

- VH-951 extension board (Sony part number: J-6389-951-A)
- RS-232C terminal (PC/AT compatible with communication software “CCT”)
- RS-232C cross cable
- S cable
- V.35 cable (PCS-K32)
- V.35 terminal adapter (TA)
- ISDN (8P) modular cable

[Preparation]

- 1) Set up the PCS-5100/5100P system to the normal operating condition.
- 2) Insert the extension board to the slot of the IF-542 board.
- 3) Insert the IF-542 board to the extension board.
- 4) Connect the video monitor to the VIDEO OUT MONITOR terminal of the rollabout processor (PCS-P500/P500P).
- 5) Connect the RS-232C terminal (to be abbreviated simply as terminal hereafter) to the AUX CONTROL terminal of the rollabout processor (PCS-P500/P500P).
- 6) Remove all V.35 cables. The V.35 cable to use must be assured of good performance.
- 7) Start up the communication software “CCT” which is installed in the terminal. Turn on the main power of the PCS-5100/5100P system (enter the debug mode).
- 8) Turn on the main power from the remote commander (PCS-R500).





3-17. OUTLINE OF IF-543 BOARD OPERATION

[System Outline]

The IF-543 board enables connection between the PCS-P500/P500P and a terminal adapter (TA) complying with the EIA standard RS-449 specifications. The PCS-P500/P500P can be connected to the ISDN line via TA. The IF-543 board operates on the physical conditions of using a 37-pin connector, the connection procedure in compliance with the EIA standard RS-449 and the electrical conditions in compliance with the EIA standard RS-422. The IF-543 board has the function of call control (connection and disconnection control to line) with TA. When a connection is established, the send signal is routed to the TA while the receive signal is routed to the VPR-019 board where video and audio signals are multiplexed/demultiplexed. The connection is to be made manually. The line speed of a port is 384 kbps of the high speed system H0 which corresponds to 6B of the BRI. The transfer speed is variable in the range from 56 to 384 kbps when using the channel aggregation that is an inter-channel multiplexing system. The IF-543 board consists of the driver/receiver block, loop back block and host interface block.

Functions of the respective blocks are described as follows:

1) Driver/receiver block

The RS-422/RS-423 signal receiver consists of IC1 and IC2 which converts the balanced and unbalanced analog data having RS-422/RS-423 characteristics to the digital signal of TTL level. The driver is IC3 which converts the TTL signal to the balanced analog data.

2) Loop back block

The IF-543 board has the two types of loop backs: one is the local loop back to transmit the send signal to the receive signal line, and the other is the remote loop back to transmit the receive signal to the send signal. The loop backs are used to check the defective boards.

3) Host interface block

The host interface block transfers the RS-449 control signal between the host CPU and the CPU of the IF-543 board.

[I/O port map]

The IF-54X (X = 1, 2, 3) board uses the address from 0210H to 024FH. The port map for the address is shown below.

Address	Name	Details	IN / OUT
0240 H	OPTST	Option status	(I)
0242 H	OPCNF	Option config	(O)
0244 H	OPRST#	Option reset	(I)
0246 H	OPSDCLR#	OPSDET [1, 2] clear	(I)
0248 H	IFINX	I/F Inport for X.21	(I)
024A H	IFOUT	I/F Outport for X.21	(O)
024C H	IFINRS	I/F Inport RS-449	(I)
024E H	IFOUTRS	I/F Outport RS-449	(O)
0210 H	IFINV1	I/F Inport V.35-1	(I)
0212 H	IFINV2	I/F Inport V.35-2	(I)
0214 H	IFOUTV1	I/F Outport V.35-1	(O)
0216 H	IFOUTV2	I/F Outport V.35-2	(O)
0218 H		not use	
021A H		not use	
021C H		not use	
021E H		not use	
0220 H		not use	
0222 H		not use	
0224 H		not use	
0226 H		not use	
0228 H		not use	
022A H		not use	
022C H		not use	
022E H		not use	
0230 H		not use	
0232 H		not use	
0234 H		not use	
0236 H		not use	
0238 H		not use	
023A H		not use	
023C H		not use	
023E H		not use	

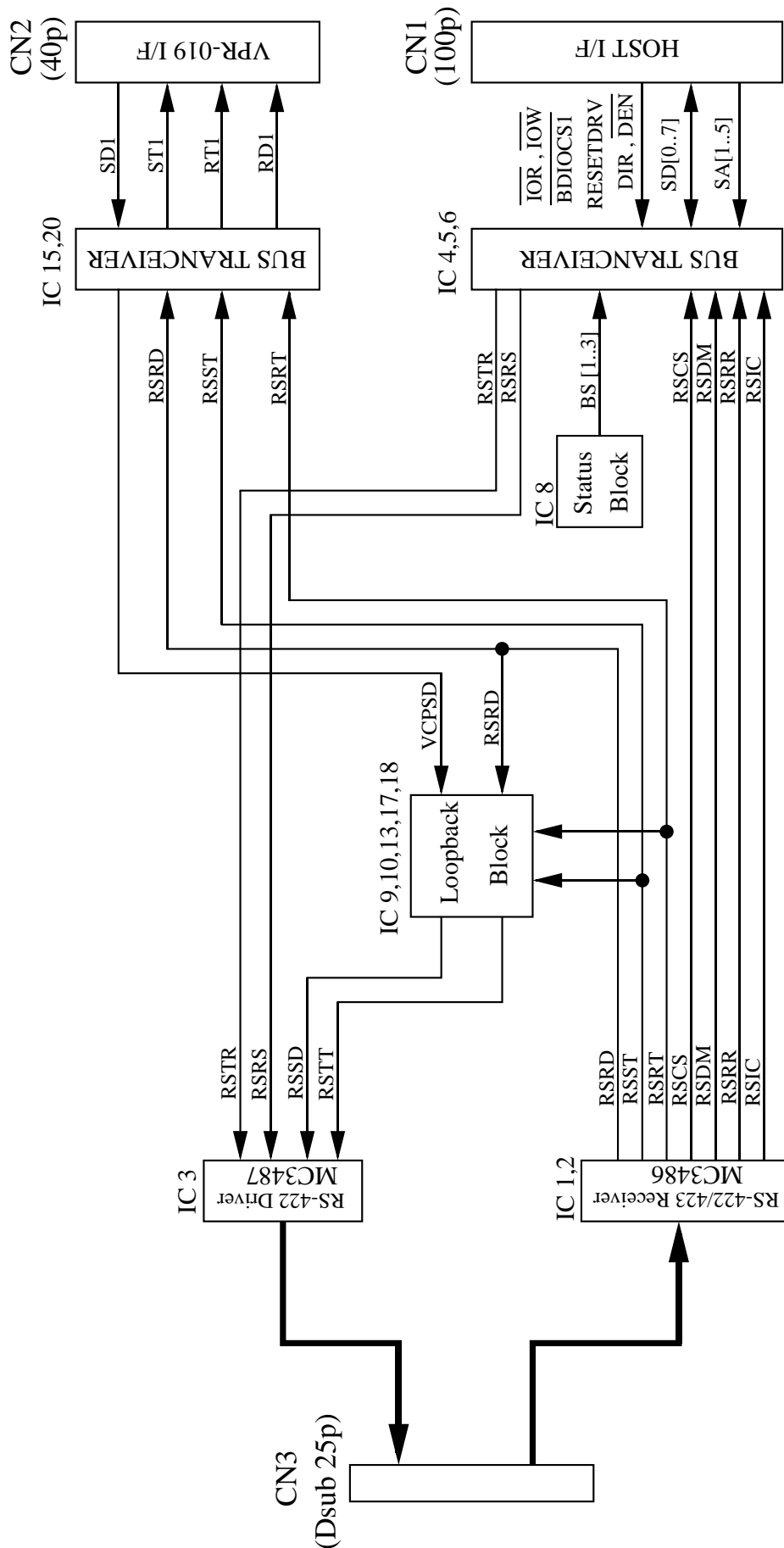


Fig. 3-17-1 IF-543 Board Block Diagram

3-18. IF-543 BOARD TROUBLESHOOTING

When any error occurs in the IF-543 board, use the flowchart as shown to locate the cause of the trouble.

[Equipment required]

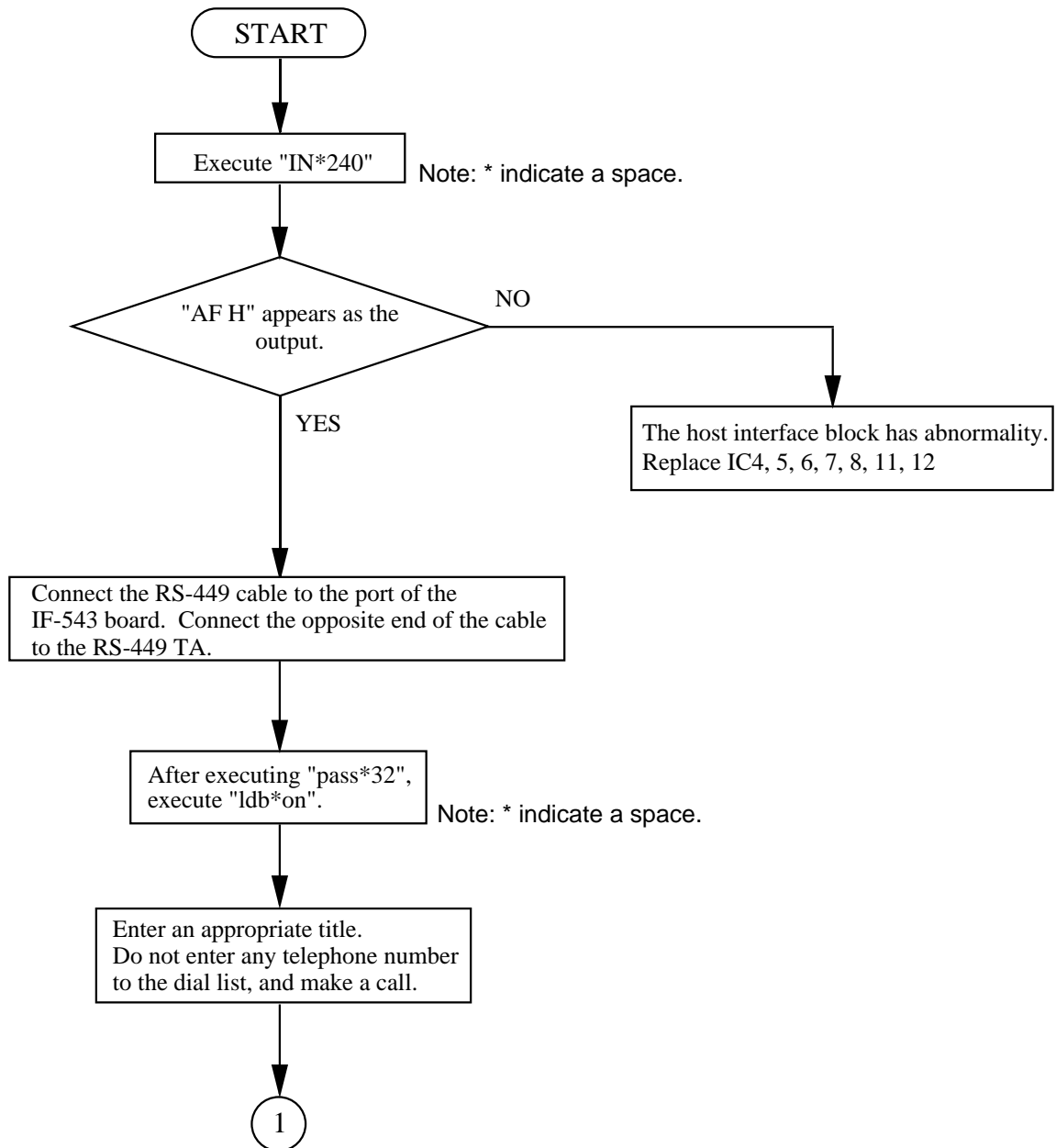
- PCS-5100/5100P system
 - Rollabout processor (PCS-P500/P500P)
 - Camera unit (PCS-C300/C300P)
 - Audio unit (PCS-A500/A510)
 - Remote commander (PCS-R500)
- Oscilloscope
- Video monitor
- Camera unit connection cable (supplied accessory)
- Audio unit connection cable (supplied accessory)

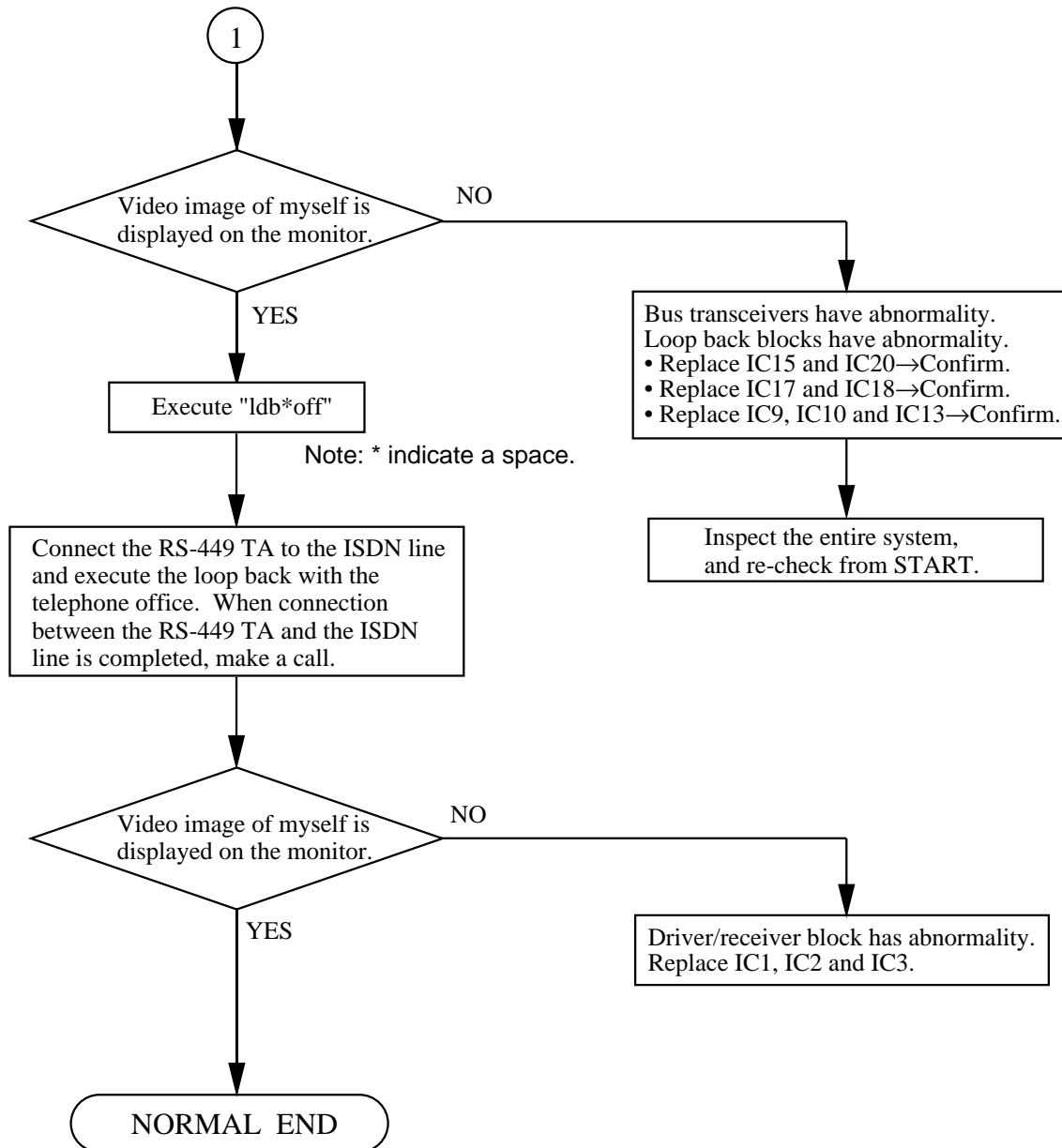
[Service tools]

- VH-951 extension board (Sony part number: J-6389-951-A)
- RS-232C terminal (PC/AT compatible with communication software “CCT”)
- RS-232C cross cable
- S cable
- RS-449 cable (PCS-K40)
- RS-449 terminal adapter (TA)

[Preparation]

- 1) Set up the PCS-5100/5100P system to the normal operating condition.
- 2) Insert the extension board to the slot of the IF-543 board.
- 3) Insert the IF-543 board to the extension board.
- 4) Connect the video monitor to the VIDEO OUT MONITOR terminal of the rollabout processor (PCS-P500/P500P).
- 5) Connect the RS-232C terminal (to be abbreviated simply as terminal hereafter) to the AUX CONTROL terminal of the rollabout processor (PCS-P500/P500P).
- 6) Remove all RS-449 cables. The RS-449 cable to use must be assured of good performance.
- 7) Start up the communication software “CCT” which is installed in the terminal. Turn on the main power of the PCS-5100/5100P system (enter the debug mode).
- 8) Turn on the main power from the remote commander (PCS-R500).





3-19. OUTLINE OF IF-583 BOARD OPERATION

3-19-1. Outline on Operation

The PCS-5000/5000P series is equipped with a 64k bits/s \times 6 transmission mode based upon ITU-T H.221 recommendations, but it cannot communicate with teleconferencing systems manufactured by other corporations at transmission speeds that exceed 128k bits/s. Communications based on the ISO/IEC13871 international standards for synchronization and unification are therefore required with the use of multiple channels of the basic ISDN line (BRI). The IF-583 board that enables ISO/IEC13871 mode B1 transfer function, and allows communications with other companies' teleconferencing systems at a maximum transmission speed of 384k bits/s. As ISO/IEC13871 has been created based on BONDING (Bandwidth On Demand Interoperability Group), it is simply known as BONDING. In addition to this, as the function for multiple channel unification simply means reverse multiplexer operations, it is known as an inverse multiplexer (I/MUX).

3-19-2. Block Diagrams

A block diagram showing the flow of the IF-583 board signals is provided in Fig.1. The hardware configuration consists of a TDM ASIC block and a DSP block. The TDM ASIC block demultiplexes the three BRI lines into multiple branches respectively, and the DSP block performs the BONDING process and the host I/F processing. The DSP block is equipped with three SRAMs (1 Mbit) as buffers for a maximum of 1.024 seconds delay between BRI channels.

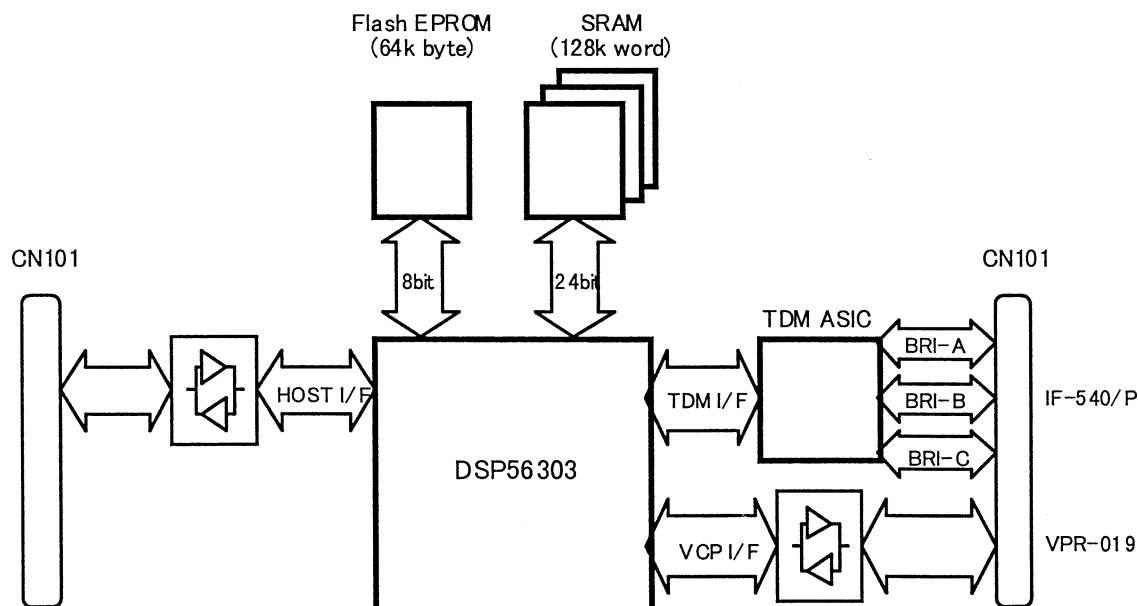


Fig. 1

3-19-3. Theory of Operation

1. Operations when the power supply switch is turned on

The operations between the host and the DSP after the power supply switch has been turned on are shown in Fig. 2.

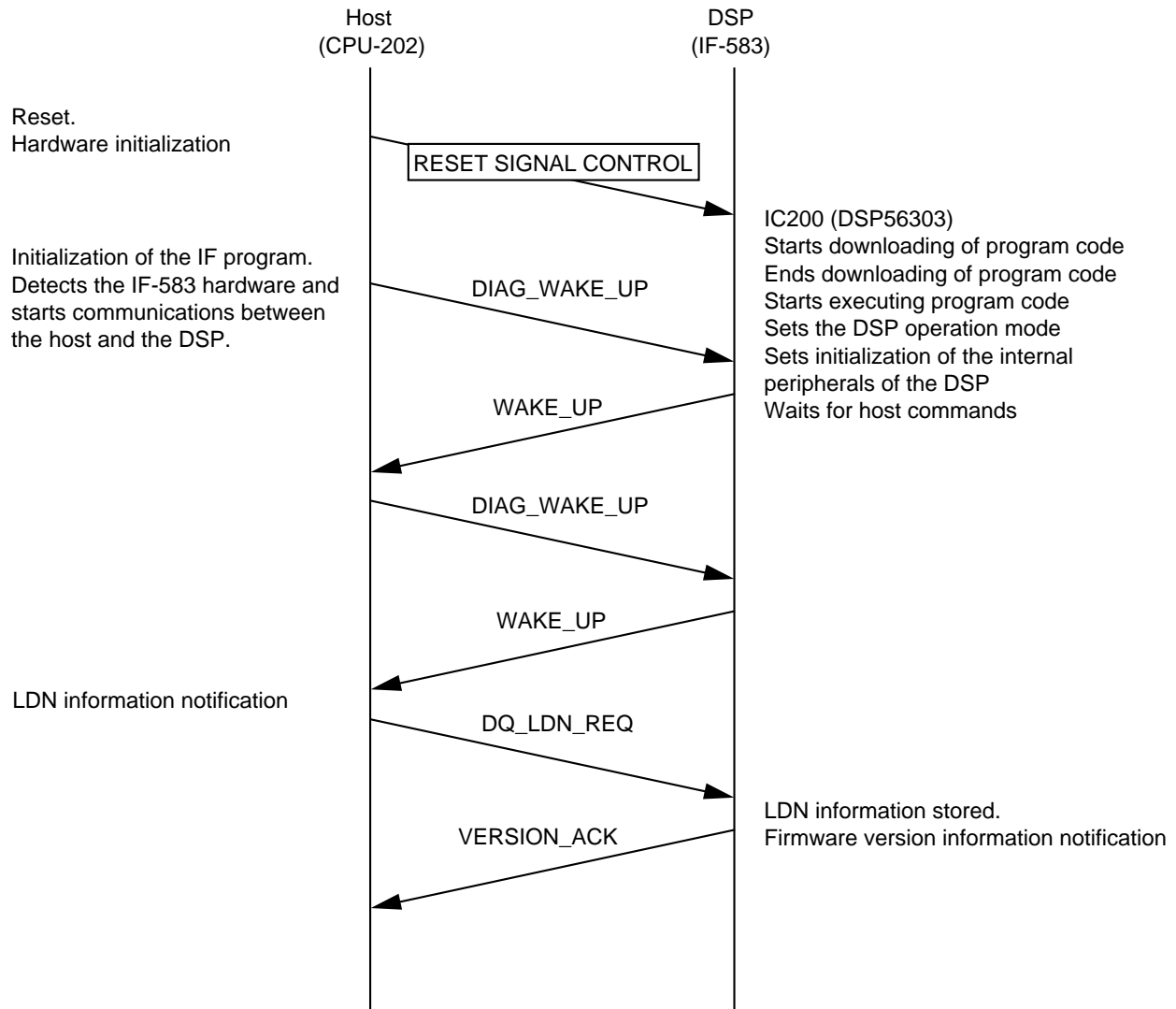


Fig. 2

As the reset signals canceled by the host after the main power is turned on, the IC200 DSP56303 starts executing the program code that is supplied from the external IC204 flash EPROM via the DSP memory path. The downloaded program code is stored in the program RAM area in the DSP, and the program is automatically executed once the specified number of bytes have been stored.

Once the program is executed, the DSP PLL settings and host I/F mode settings are performed, and the built-in peripherals (interrupt controller, timers, serial controller) are initialized. When initialization is completed the system waits for command messages to be supplied from the host.

The host issues the DIAG_WAKE_UP (0BF) command to request recovery from the sleep mode. When the DSP receives this command, it issues an interrupt internally, then reads and analyzes the command. After the command is analyzed, the WAKE_UP (0BBF) is return to the host. The host repeats this process twice. The host then issues the DQ_LDN_REQ (5aaaaaabb.....eeffffff) command to notify the LDN information. This information is stored in the DSP as it is required for exchanging DN (Directory Numbers) during BONDING connections. Three digit numbers representing the DSP firmware version No. are returned to the host once the storage process is completed normally.

2. DSP host I/F specifications

Access from the host to the DSP is performed via the PCS-5000/5000P series I/O port.

I/O port address : 138H (formerly DSP-A)

13AH (formerly DSP-B)

I/O data width : 8 bits

- Host data write register (OUT)

bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0
	HAB	$\overline{\text{RDACK}}$	$\overline{\text{WRREQ}}$	BNO3	BNO2	BNO1	BNO0

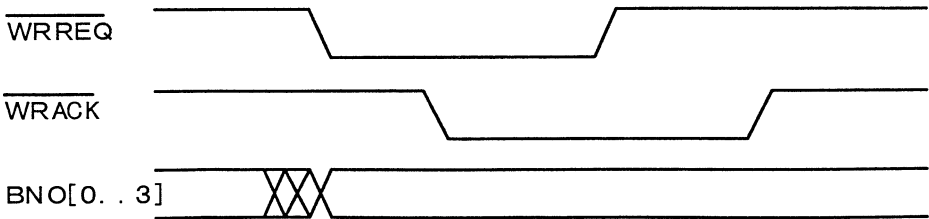
- bit 0-3 : Host write data (4 bit-Nibble)
- bit 4 : Host data write request (1.. Idle, 0.. Request)
- bit 5 : DSP data read ACK (1.. Idle, 0.. ACK)
- bit 6 : Host data write enable bit (1.. Enable, 0.. Disable)

- Host data read register (IN)

bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0
BONDET		$\overline{\text{RDREQ}}$	$\overline{\text{WRACK}}$	BNI3	BNI2	BNI1	BNI0

- bit 0-3 : DSP read data (4 bit-Nibble)
- bit 4 : DSP data read request (1.. Idle, 0.. Request)
- bit 5 : Host data write ACK (1.. Idle, 0.. ACK)

Example of host data write timing



3. Operations during BONDING connections

The operations of the IF-583 board during BONDING connection are described below. The command communication between the host and the DSP when a call is issued at 384k bits/s (from the BONDING call request upto acquiring of the DN information) is shown as an example in Fig. 4.

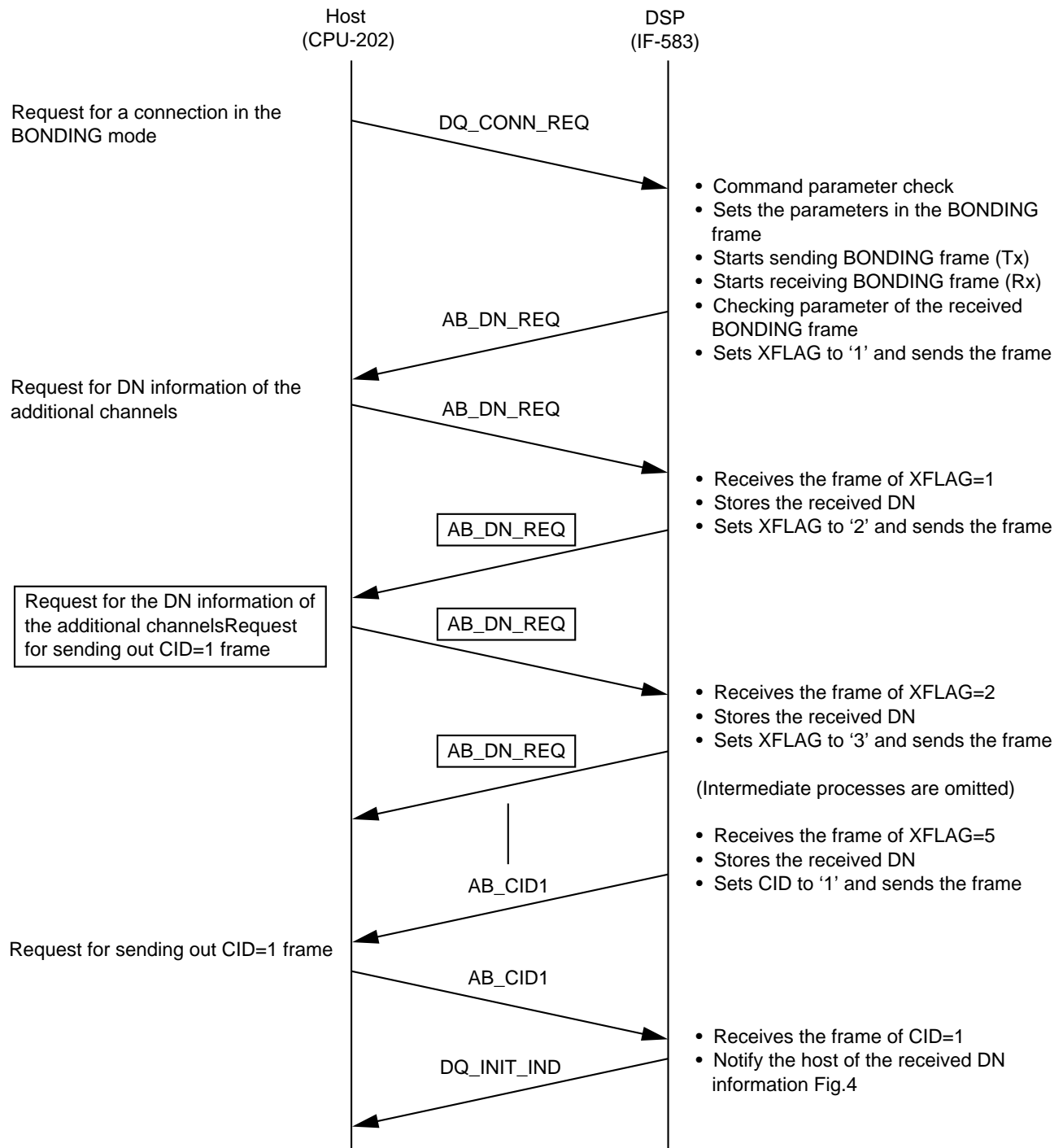


Fig. 4

When a request for a connection in the BONDING mode is issued, the host issues the DQ_CONN_REQ (11611F) command for the IF-583 DSP. When this command reaches, the DSP analyzes and checks the parameters of this command. The DSP inserts the connection parameters in the BONDING frame, approves the send/receive interrupt for the serial controller, and starts transmission of the BONDING frame. The BONDING frame to be sent consists of 16 octet cycle data strings (FE, 81, 81, F9, B1, BF, 81, 81, FF, FF, FF, FF, FF, FF, FF, FF). At the same time as BONDING frame transmission is started, the DSP starts searching the BONDING frame from the other system.

Once the BONDING frame from the other system is detected, DSP checks the respective parameters contained in the frame. If more of the DN information is necessary, the DSP issues the AB_DN_REQ (A16101) command to the host in order to indicate start of the acquisition of the DN information. The DSP sets the XFLAG=1 parameter in the transmission frame. The frame to be transmitted consists of {FE, 81, xx, F9, B1, BF, 81, 81, C1, FF, FF, FF, FF, FF, FF, FF}. The host returns an acknowledge (ACK) in response to the AB_DN_REQ command. If the XFLAG=1 parameter is set in the frame that is received from the other system, the DN information is stored in the internal memory and the XFLAG=2 parameter is set in the transmission frame. When the DN information up until XFLAG=5 is acquired in the same way, CID=1 is set to indicate that DN information exchange has finished, and the frame is then transmitted. The DSP waits for CID=1 parameter of the other system. It then issues the AB_CID1 (C1F) command to the host to indicate that DN information exchange with the other system is completed. The host returns an acknowledgment (ACK) in response to the AB_CID1 command. Once CID=1 is confirmed in the frame of other system, the DQ_INIT_IND (161aaaaabb...ffffff) command requesting connection of an additional channel request is issued to the host. The DN information selected through negotiation will be inserted into bbbbbb,...,ffffff.

The host starts connection of an additional channel using the DN information acquired from the DSP. Once connection of the additional channel is completed, the DQ_CONN_REQ (11611F) command is issued to the DSP. The DSP then starts a multiple frame transmission with all channels including the additional channel. At the same time, the DSP starts searching the multiple frames that are received from the other system. Once the DSP detects the sync code in the respective channels, the DSP sets it in A=1 of the CRC octet, and transmits the multiple frame. When the sync code of all channels are detected, the DSP issues the AB_MF (D1F) command to the host. The DSP then calculates the relative delay for all channels based on the FC octet values. When the delay is calculated for all channels, the RI=1 parameter is set and multiple frame transmission is started. The DSP issues the AB_ADDCH_EST (EF) command to the host to indicate that phase correction between channels is completed. At the same time, once the RI=1 parameter is detected in all channels of the frame received from the other system, the DSP issues the DQ_LSYNCH_IND (61F) command to the host.

The DSP sets the parameter A=0 and sends the multiple frame to indicate that the H.221 data is ready for transmission. At the same time, the DSP searches for the parameter A=0 in the multiple frame that is received from the other system. If A=0 is detected or multiple frame sync is lost, the DQ_RSYNCH_IND (7F) command is issued to the host to request data transmission of H.221. The DSP then halts the transmission of the multiple frame and starts to transmit the H.221 frame data received from the VCP. The delay between channels in the data received from the other system's terminal is corrected and the data then sent to the VCP. An example of the communications between the host and the DSP starting from connection of an additional channel up until the transmission of H.221 data is shown in Fig.5.

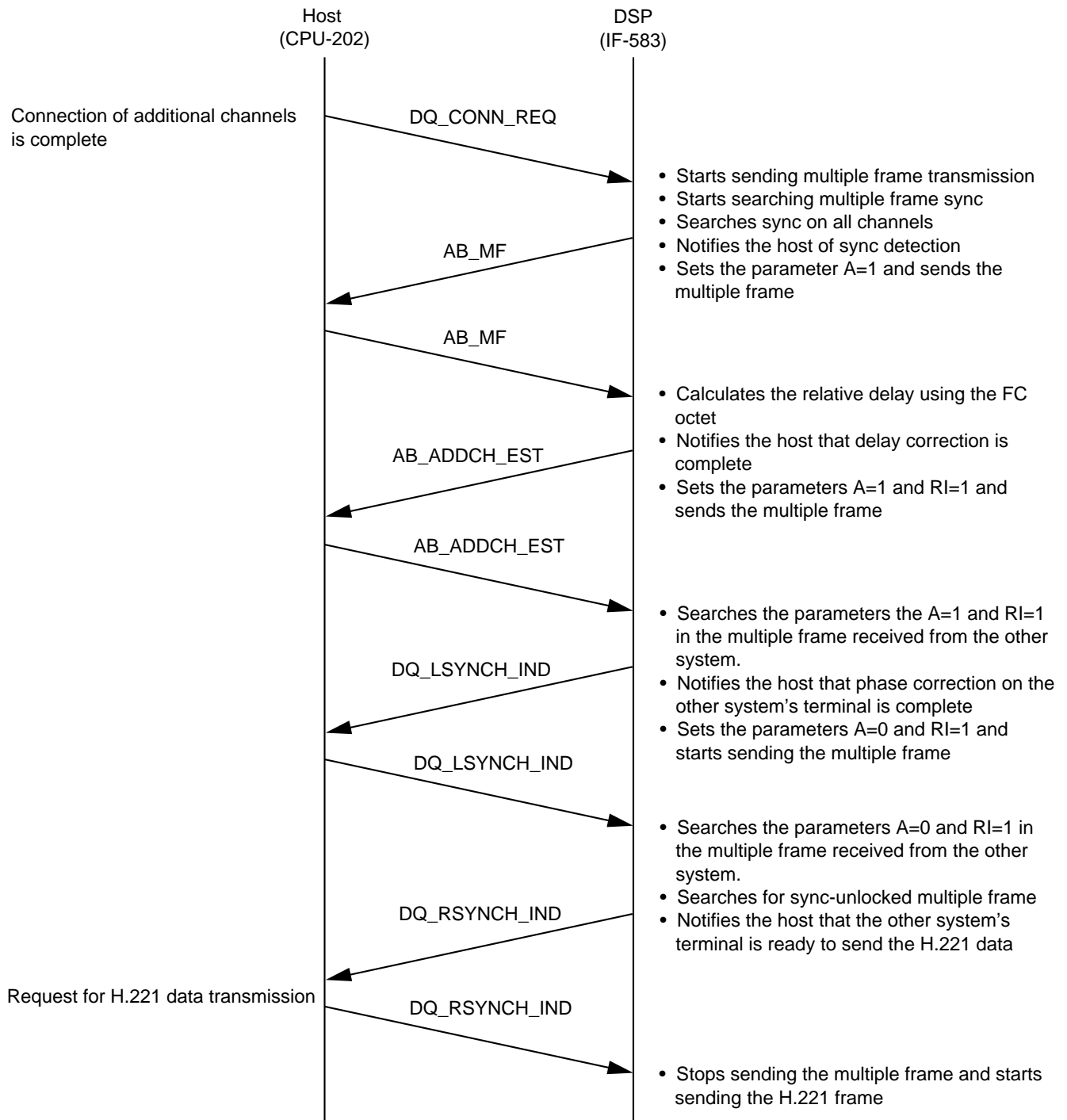
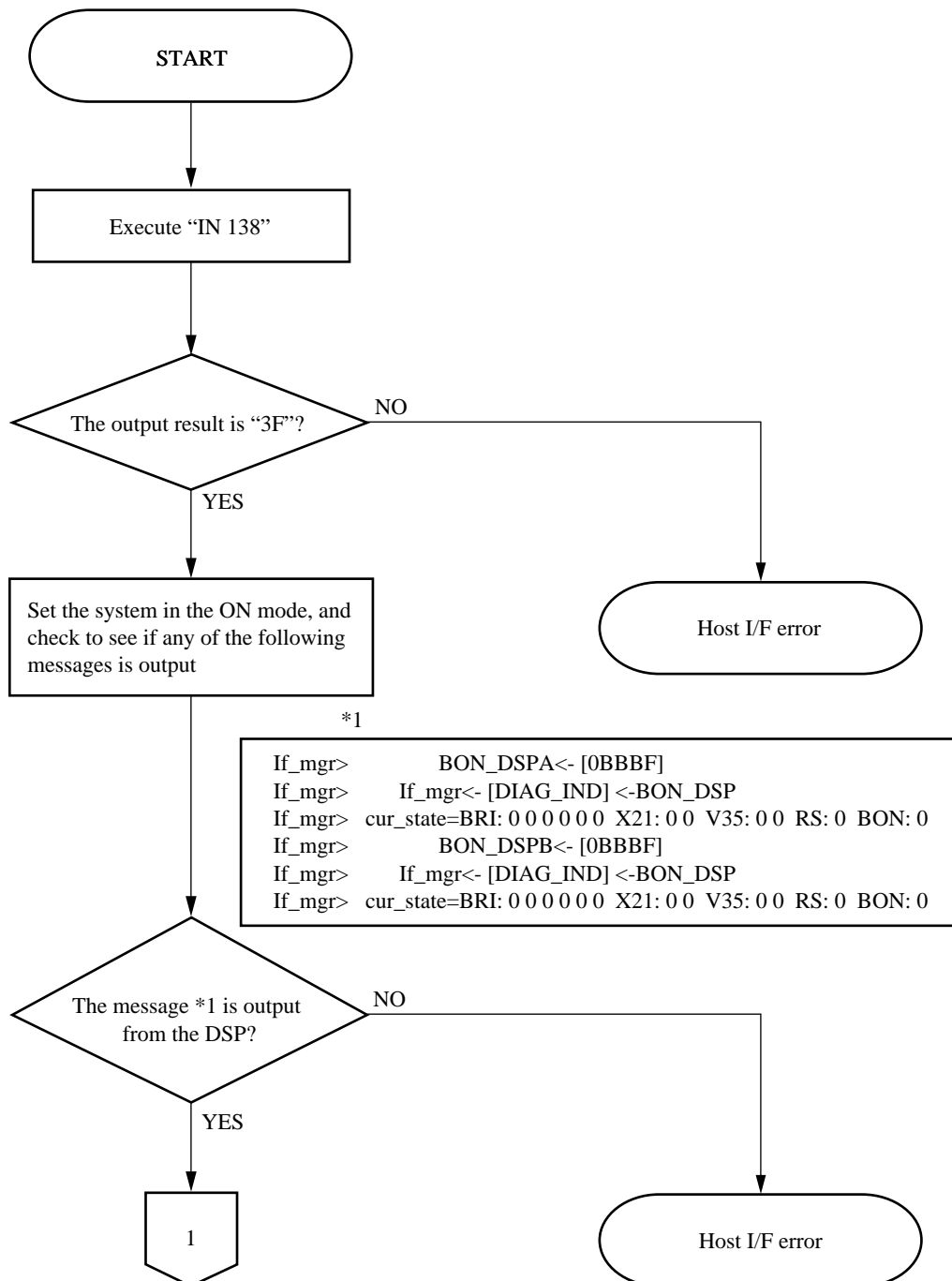


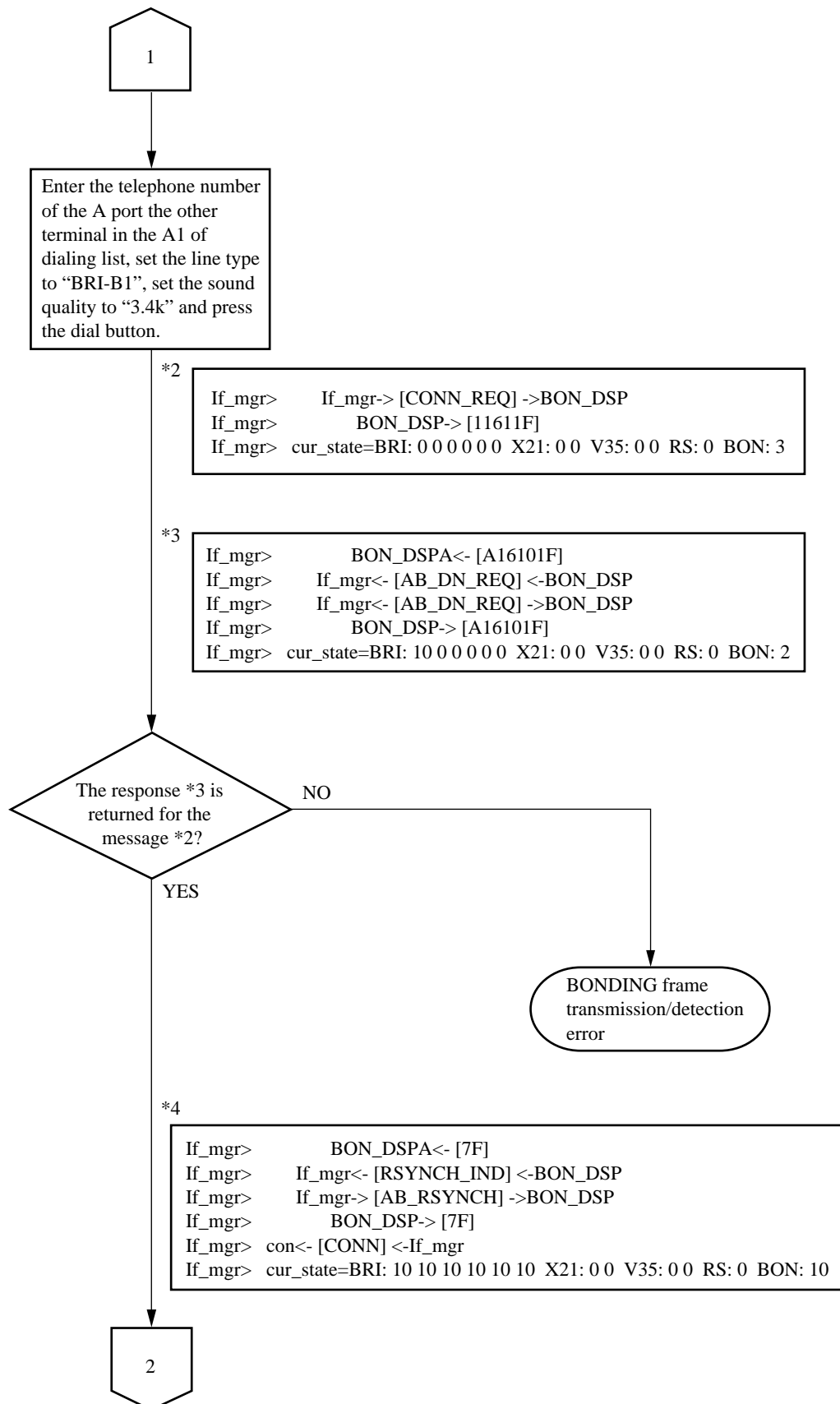
Fig. 5

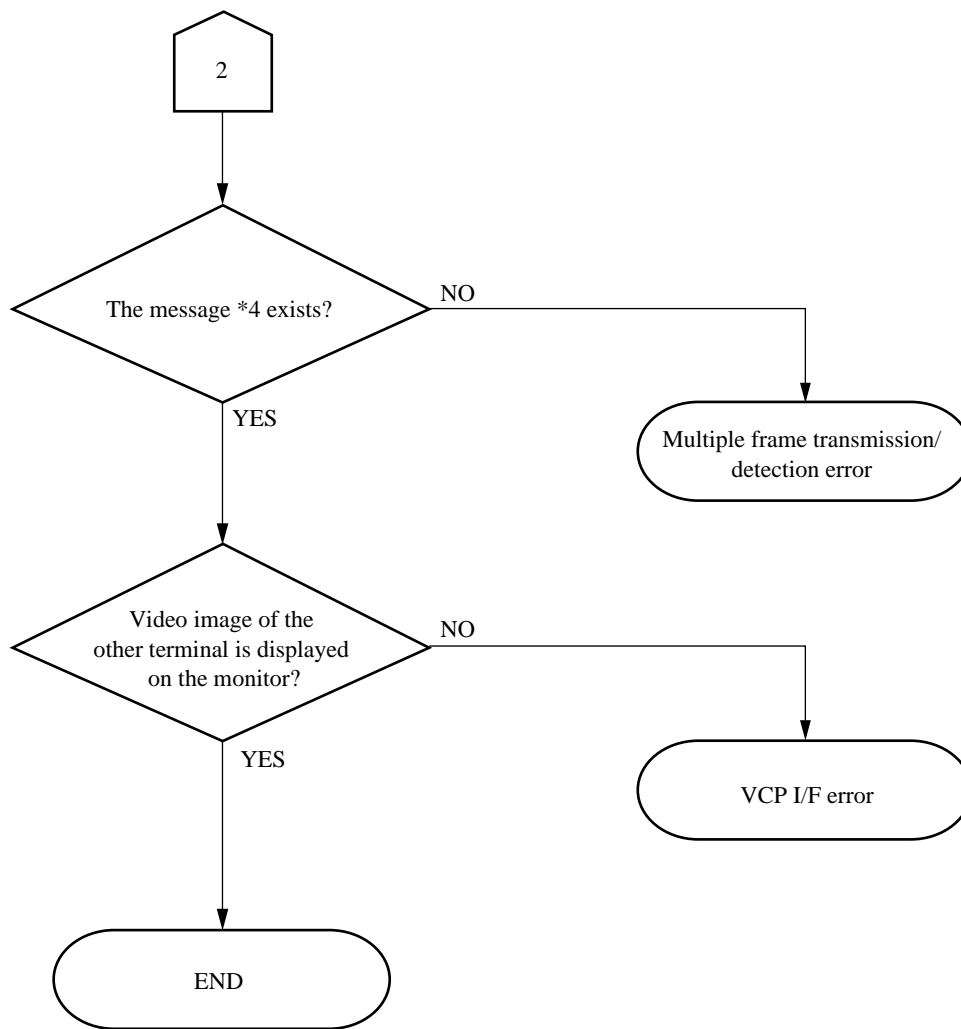
3-20. IF-583 BOARD TROUBLESHOOTING

[Required tools and equipment]

PCS-5000/5000P series (system software Ver.5.05 or higher)	2 sets
Terminal emulator (Windows 95 Hyper Terminal, etc.)	
RS-232C cross cable	
ISDN communication line (or telephone exchange simulator)	6 lines
Oscilloscope	





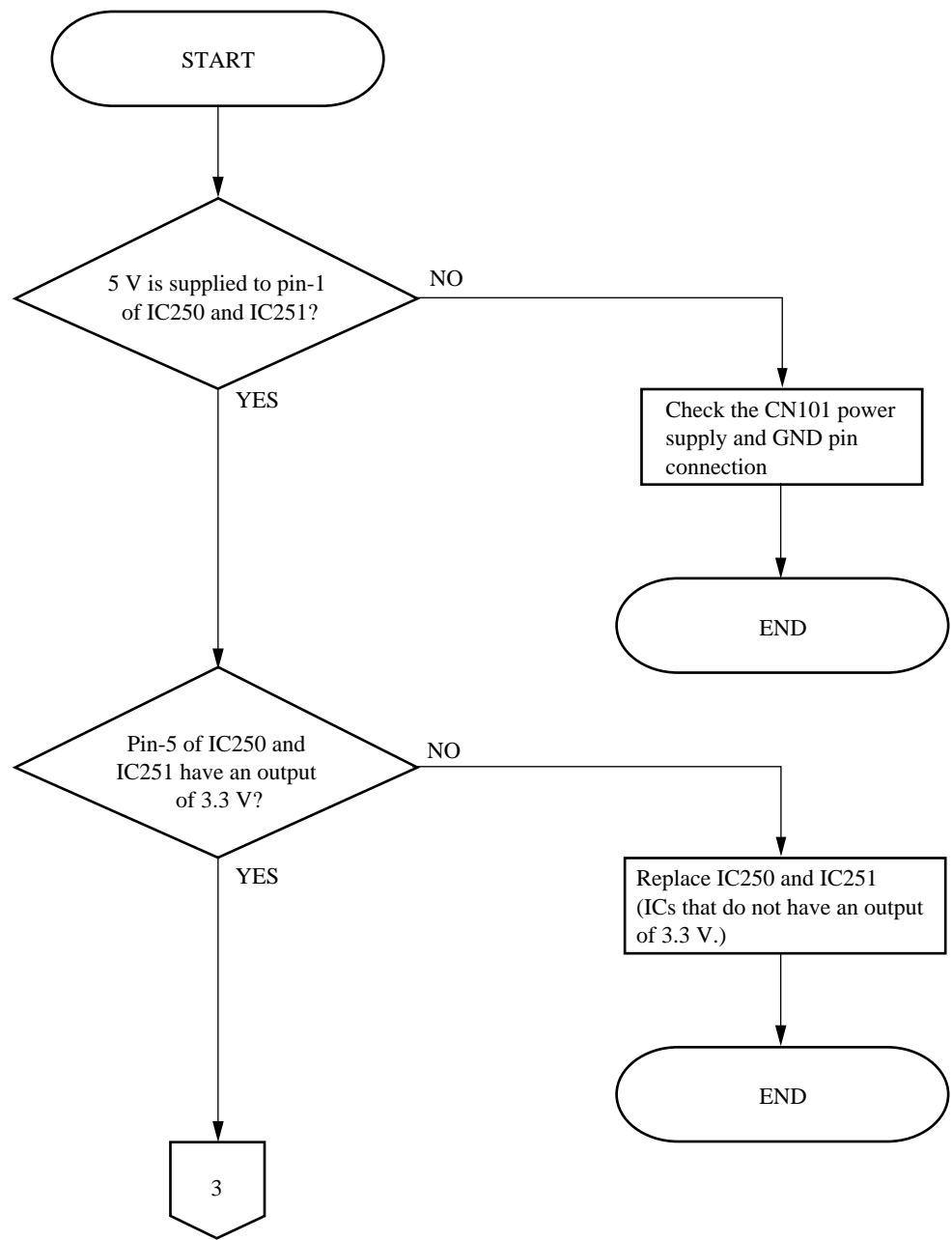


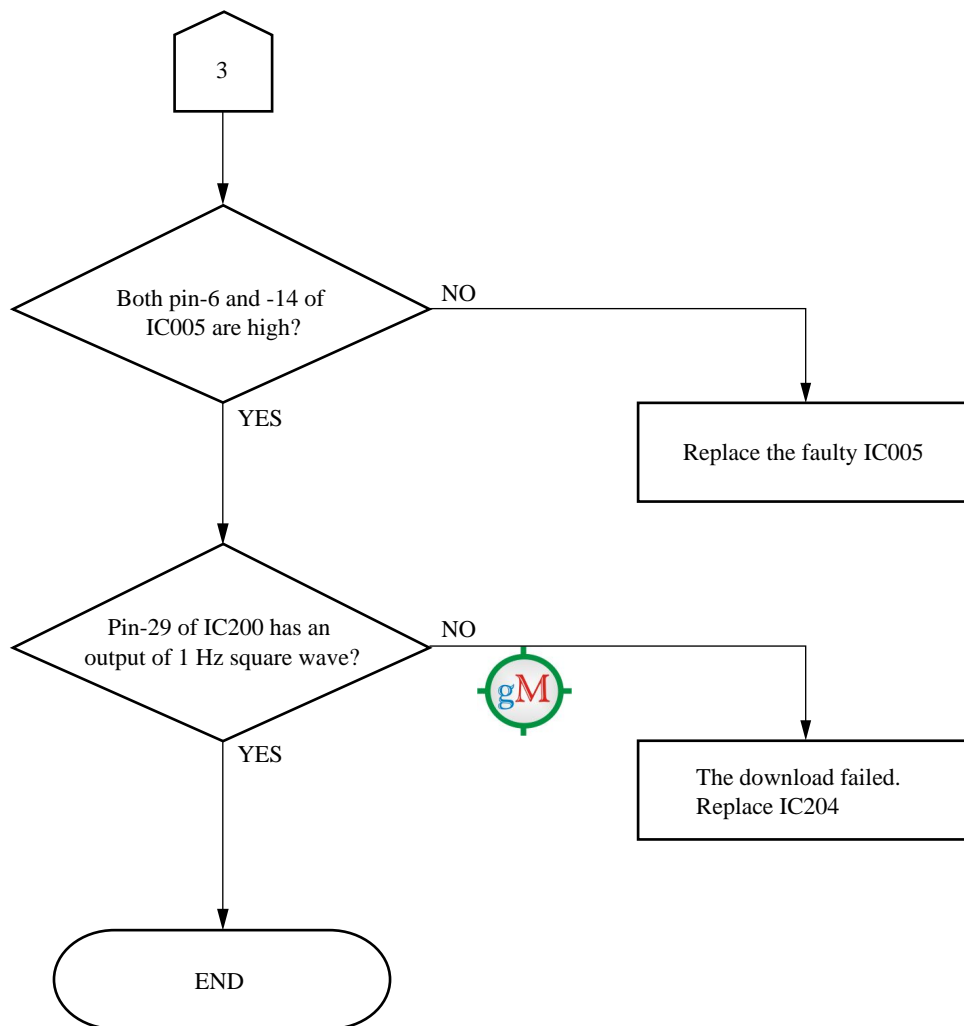
[Remedial measures for errors]

• Host I/F error

Cause : Downloading of the DSP program code failed or a faulty IC exists in the I/F between the DSP and host.

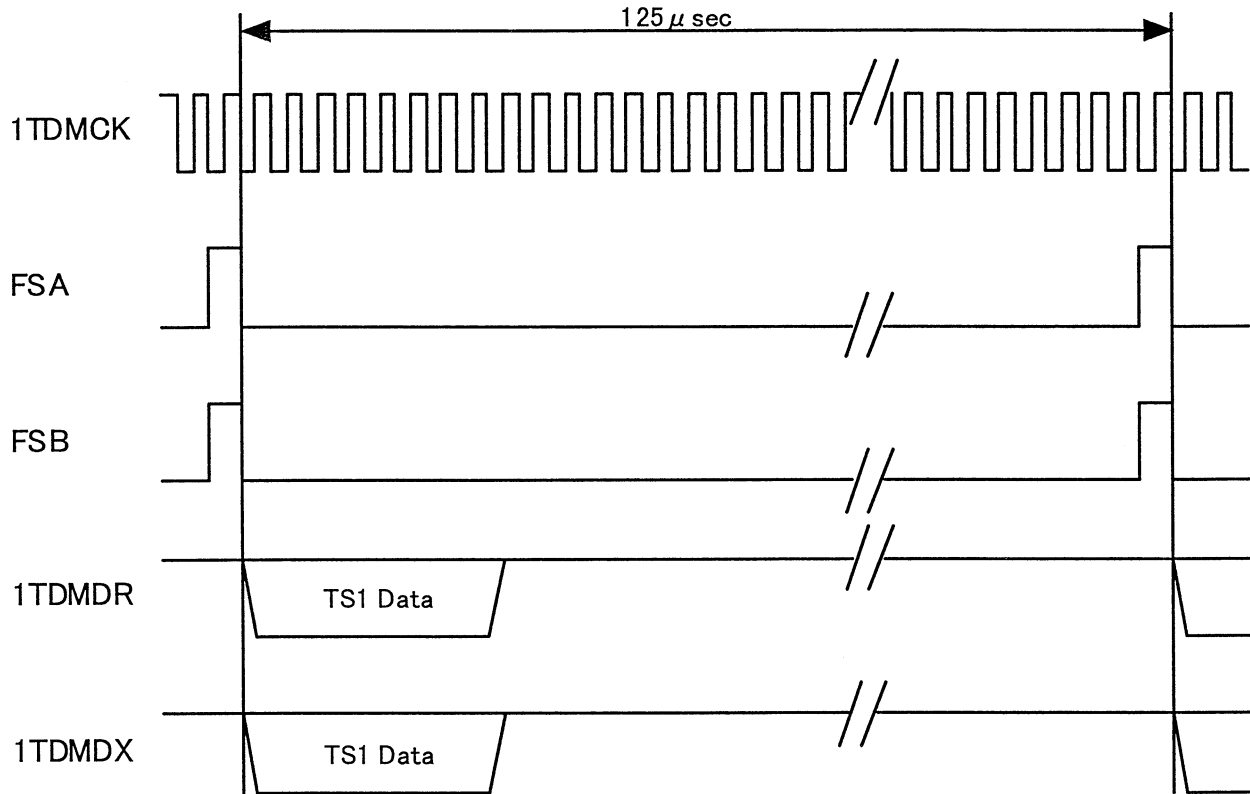
Related devices : IC200, IC201, IC202, IC203, IC204, IC001, IC002, IC022, CN101





- BONDING frame transmission/detection error
Cause : Faulty DSP serial I/F
Related devices : IC005, IC006, IC008, IC200

The relationship between 1TDMCK (CL005), FSA (CL009), FSB (CL008), 1TDMDX (CL003) and 1TDMDR (CL004) during normal operations is shown in the diagram below.



- | | | |
|----------------------|---|--|
| FSA, FSB clock fault | → | Replace IC008 |
| 1TDMCK clock fault | → | check the X001 output and the IC006 TDMCK (117) output |
| 1TDMDR data fault | → | Check the input of IC006 RBA1 (85), CK8K1 (82) and CK64K1 (83) |
| 1TDMTX data fault | → | Replace IC200 |

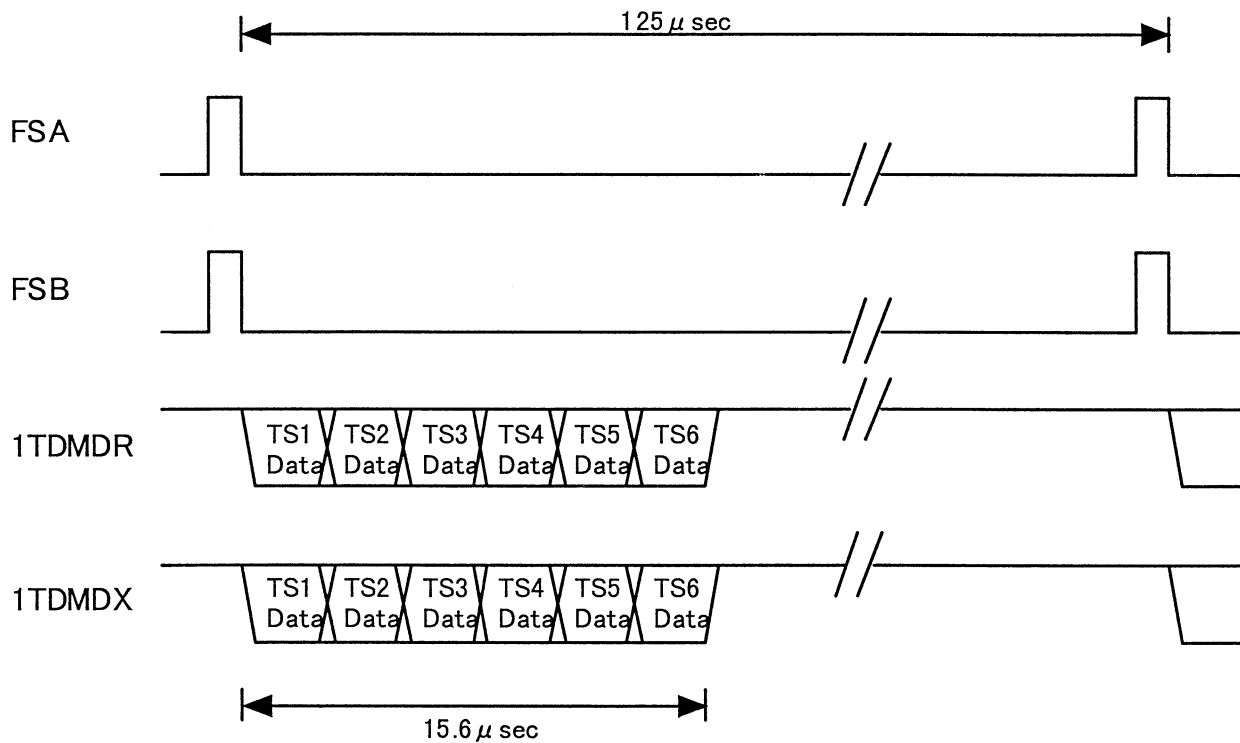
100 (PCS-5100/5100P-E)

- Multiple frame transmission/detection error

Cause : Faulty DSP serial I/F or faulty external SRAM IC

Related devices : IC005, IC006, IC008, IC200, IC201, IC202, IC203

The relationship between FSA, FSB, 1TDMDR and 1TDMDX during normal operations is shown in the diagram below.



1TDMDR data fault → Check the input of IC006 RBA [1..3], RBB [1..3], CLK8K [1..3] and CLK64K [1..3]

1TDMDX data fault → Replace IC201, IC202 and IC203

- VCP I/F error

Cause : Faulty I/F between the CVP and DSP

Related devices : IC005, IC006, IC200, IC201, IC202, IC203, CN101

H.221 cannot be synchronized → Check the input of 2TDMDX (CL002) and 2TDMDR (CL001)

The image has a blue background → Replace IC201, IC202 and IC203

3-21. OUTLINE OF DAD-33/33P BOARD OPERATION

The video signal flow of the PCS-5100/5100P is shown in Fig. 3-7-1.

Overall block diagram of the DAD-33/33P board is shown in Fig. 3-21-1.

3-21-1. Outline of the DAD-33/33P Board

The DAD-33/33P (PCS-G510/P) board is an optional circuit board that displays the human portrait, still picture/document data on display in the PCS-5100/3 and PCS-5100P/3, and also fetches and displays the PC (personal computer) data. This is the successor of PCS-G500/P. The PCS-G500/P can be installed to both of PCS-5100/3 and PCS-5100P/3, and also into the previous models (i.e., PCS-5000, PCS-5000P, PCS-5100/1, PCS-5100P/1 and PCS-5100P/2). However, the PCS-G510/P can be installed into PCS-5100/3, PCS-5100P/3 and the succeeding models, only and cannot be installed to the previous models.

The DAD-33/33P board performs the following two signal processings.

- 1) Converts the RGB signal (VGA and SVGA format) to the Y, U, V digital signals, and then scan-converts the Y, U, V digital signals to the NTSC/PAL format that is sent to the VPR-019 board.
- 2) Converts Y, U, V digital signals that is supplied from the VPR-019 board, to the Y, C signals of the NTSC/PAL signal and sends them to the external devices.

At the input side of the DAD-33/33P board, the RGB signal of the externally input VGA and SVGA are converted to the Y, U, V signals by the matrix circuit. These Y, U, V signals are converted to the digital signals by the A/D converter, and then converted to the NTSC/PAL format by the scan converter. These Y, U, V signals take the two paths. One output is sent to the VPR-019 board while the other output is returned here and is output to the encoder block of the DAD-33/33P board. The clock signal that are synchronized the input RGB signal is generated, the horizontal sync signal and vertical sync signals are detected and are output to the VPR-019 board. The RGB input signals that the DAD-33/33P board can support, are the VGA (640×480) signal that has the refresh rate of 60, 72, 75 and 85 Hz, and the SVGA (800×600) signal that has the refresh rate of 56, 60, 72 and 75 Hz.

At the output side of the DAD-33/33P board, either one of the input signals is selected among the input signals such as the input signal from the VPR-019 board, the signal that is returned by the scan converter of the input block and the menu display signal that is input from the DAD-017/017P board. Any one signal or combination of the two input signals is selected as desired and converted to the digital Y, U, V signals. These digital Y, U, V signals are passed through the encoder + D/A converter so that the analog Y, C signals (NTSC, PAL) are created and output to the external devices. At the same time, the input RGB signals are amplified and directly output through a 75-ohm driver in order to display them on monitor.

The various controls such as mode selection of the DAD-33/33P board are not only performed by the CPU-202 board through the DAD-017/017P board, but also performed by the DIP switches on the DAD-017/017P board.

3-21-2. Video Decoder Block (schematic diagram 1/8)

In the conventional DAD-018/018P board (PCS-G500/P), the NTSC or the PAL signal that is input from the DAD-017/017P board is decoded and from which the clock signal for AD conversion is generated. But this circuit is deleted in the DAD-33/33P board.

All of the signal processing are performed in the DAD-017/017P board.

3-21-3. RGB → YUV Conversion Block (schematic diagram 2/8)

The RGB signals of the VGA and SVGA that are input from CN3, are converted to the Y, U and V signals by the matrix circuit. This conversion circuit consists of the discrete circuit (Q15 through Q39 and peripherals). The conversion is performed by the resistive addition and use of differential amplifiers.

Input signal to the conversion circuit is band-width limited by the two channel low-pass filters (FL2 to FL7) in order to prevent occurrence of aliasing during AD conversion. Since input signal varies in the wide frequency range of 31.5 kHz to 53.7 kHz, sampling frequency of the AD conversion also changes in the wide range of frequency accordingly. It requires that input frequency must pass through the two types of low-pass filter having different cut-off frequency. The low-pass filter consisting of FL2, FL3 and FL4 is prepared for low frequency range while the low-pass filter consisting of FL5, FL6 and FL7 is prepared for high frequency range. The two types of Y, U and V signals that are output from the respective low-pass filters, are sent to the AD conversion block. Either which of the two signals is selected by the selector of the AD converter block whereas the selector is controlled by the control signal whether the horizontal sync frequency is 40 kHz or higher or lower.

3-21-4. RGB Input Sync System (schematic diagram 3/8)

The horizontal sync and vertical sync signals of the VGA and SVGA that are input from CN3, are sent to CXA2016 (IC11). Polarity of the sync signals changes depending upon the formats of the input signal, however, the output sync signals from this IC are the sync signals of the high-active signal. The clamp pulse for AD conversion is generated by this IC.

The horizontal sync and vertical sync, polarity of which is unified to high-active by CXA2016 (IC11), are sent to ispLSI1016E (IC10) for detection of the input signal format. The horizontal sync signal is at the same time input to PLL circuit and also to the input signal detection circuit (74HC123 (IC14)). The vertical sync signal is sent directly to the scanning line conversion block. The clamp pulse that is output from IC11 is selected when input signal is present, and the horizontal sync that is regenerated by PLL is selected as clamp pulse when input signal is absent. The selected clamp pulse is controlled of its clamp pulse for a constant pulse with by 74HC221 (IC36), and is sent to the AD conversion block.

The input format detection circuit (IC11) detects the VGA/SVGA identification and the detection of input horizontal sync frequency if it is high/low (40 kHz or higher/or less). The identification signal output from the input format detection circuit is sent to the scanning line conversion block and is also used as the low-pass filter selection control signal for Y, U and V signals. The input format detection circuit (IC11) decodes the control signal that is supplied from the DAD-017/017P board and generates the controls signals such as selector signal for the video signal output block.

The horizontal sync output signal from IC11 is sent to PLL circuit via 74HC221 (IC36), where this signal is input to PLL IC TLC2932 (IC13). This IC has phase comparator, amplifier and VCO internally, and constitutes a PLL with the external frequency divider (IC16 to IC20). The PLL generates the clock signal that is used as the reference of the input signal system, for example AD conversion, and also re-generates the horizontal sync signal. The PLL uses the frequency dividing ratio of 770 because the clock signal frequency is 770 times of the input horizontal sync signal.

3-21-5. AD Conversion Block (schematic diagram 4/8)

The respective analog signals that are converted to the Y, U and V signals from the RGB signal of VGA and SVGA, are passed through the two types of low-pass filter that have different cut-off frequencies for suppressing the aliasing, and are input to the selector. This selector has nominally three inputs. However, because the video decode block is deleted, the remaining one input is left as no input. Selection of one input among the three inputs is controlled by the horizontal sync frequency high/low detector output of IC11 and the input select control signal that is supplied from the DAD-017/017P board. (However, during the D2 bypass mode, the “no-input” is not forcibly selected but the RGB input is selected.) Output of the selector is amplified by the video amplifier and is AD converted by CXD2302 (IC22, IC23, IC24). (8 bits)

CXD2302 itself has the clamp function. The external comparator (IC25) and analog switch (IC27) are connected to form a feedback clamp circuit which clamps the blanking level automatically to the specified level. The clamp level is digitally 10H for the Y-signal and is 80H for the U, V signals.

The sampling frequency for the Y-signal is 770 times of the input horizontal sync frequency, and that for the U, V signals is 385 times i.e., half of that for the Y-signal, of the input horizontal sync frequency. (For example, when VGA 60 Hz is input: 24.2 MHz, when SVGA 75 Hz is input: 36.1 MHz) The clock signal frequency is maintained to be an integer multiple of the input sync signal frequency to be used for AD conversion, is written into the memory of the scanning line conversion block, and is read from the memory using the NTSC or PAL clock (13.5 MHz) signal. Thus the horizontal picture size (number of dots in horizontal direction) is kept to be an appropriate value after the video signal is converted to the NTSC or PAL signal regardless of the input format if it is VGA or SVGA format.

3-21-6. Scanning Line Conversion Block (Input Side) (schematic diagram 5/8)

The number of pixels in the horizontal direction is adjusted by PLL fixed the dividing ratio of the sampling frequency during AD conversion to convert the VGA and SVGA to NTSC or PAL signals. However, this scanning line conversion block performs the scanning line conversion by using the weighted addition between the two lines in the vertical direction.

The AD-converted U, V signals are time-base multiplexed by IC104, IC105, IC106 and IC109 so that they are formed into the 8-bit signal which is sent to the field memory (IC115, IC116).

Because the Y-signal and the U, V signals use the different sampling frequencies, the different low-pass filters are used before AD conversion. And amount delay due to AD conversion is different in these signals so that the delay time difference between the Y-signal and the U, V signals occurs and is minimized by passing the AD converted digital Y-signal only through a shift register (IC102). (Number of shift registers to be used is switched by the horizontal sync frequency high/low detection signal. (IC103)) Then the Y-signal is sent to the field memory (IC113, IC114). The clock signal, horizontal sync signal and the vertical sync signal that are generated by the sync system (input side) are passed thorough 74VHC244 (IC107) and 74VHC157 (IC108), and are input to the memory controller (ispLSI1032E: IC119) via IC109, IC110 and IC111. On the other hand, the horizontal sync signal that is regenerated by PLL, and the vertical sync signal which is synchronized with the horizontal sync signal are input to the memory controller (ispLSI1032E: IC119).

The field memory (IC113, IC114, IC115, IC116) is controlled by the timing pulse that is generated by the memory controller (IC119). The Y, U and V signals are written to the field memory (IC113, IC114, IC115, IC116) in synchronism with the sampling clock. This writing is performed into IC113/IC114 (Y) and IC115/IC116 (U, V) alternately every other horizontal line.

Reading from the field memory is controlled by the memory controller IC119, and is performed in synchronism with the clock (13.5 MHz) of NTSC and PAL (ITU-R601). This clock signal is the same as that of the sync system of the output side. The free-running clock (27 MHz) that is generated by the DAD-017/017P board is input through the VPR-019 board, and is frequency-divided by two. When the video data is read from the field memory, reading is performed in a way that some horizontal lines are read out sequentially, some horizontal lines are read out repeatedly while a horizontal line is skipped. The two outputs from the respectively field memories are sent to the weighted adder where the data is added while the coefficient to be multiplied is changed in every horizontal line. This coefficient is also controlled by the memory controller IC119. The added output is sent to the VPR-019 board via CN2.

3-21-7. Menu Signal Input Block (schematic diagram 6/8)

The menu signal that is multiplexed with the output video signal of the DAD-33/33P board, is generated by the DAD-017/017P board and is sent to this board with 4-bit data of Y, U and V signals respectively in synchronism with the 13.5 MHz clock of the output system. Among the Y, U and V signals, the U and V signals are deduced respectively to 1/2 by IC122 in order to match the signal format with other video signals, and then is time-multiplexed into single 4-bit signal by IC123. The U and V signals and the Y-signal that has passed through IC121 are the 4-bit signals and are super-imposed with other signals at the selector (IC126, IC127) as the higher 4-bit signal of the 8-bit data.

The YS signal that generates the timing for multiplexing the menu signal, is sent to ispLSI1016E (IC10) that is the input signal format detector and is at the same time the output selector controller. IC10 controls the output signal selector (IC126, IC127) using the information such as the control bit and blanking signal that are supplied from the I/O port of the DAD-017/017P board.

3-21-8. Sync System (Output Side) (schematic diagram 7/8)

The free-running clock (27 MHz) that is generated by the DAD-017/017P board, is input to the DAD-33/33P board via the VPR-019 board. This clock is input to the digital video encoder IC CXD1913Q (IC31) where it is frequency-divided by two and generates the 13.5 MHz clock. The VPR-019 board uses this clock as the reference and generates the horizontal sync signal, vertical sync signal and field identification signal that are input to this board. This board uses these sync signals as the reference and generates the sync timing (IC130, IC131, IC132, IC133) for the encoder IC CXD1913Q which outputs the video signal in synchronism with the input signal from the VPR-019 board. In other words, the VPR-019 board works as the master sync generator and this board is the slave circuit.

The sync signal of the output side, is output to the menu signal generator of the DAD-017/017P board where the sync signal is used as the reference of the menu signal to be displayed in the output of this board.

3-21-9. Encoder and DA Converter (schematic diagram 7/8)

Video signal encoding and DA conversion are performed by CXD1913Q (IC31).

The digital video signal (8 bits) that is selected by the selector (IC126, IC127) among the four inputs which are the input signal from the VPR-019 board, the input signal from AD converter, the black level signal for blanking and the menu signal, is input to this IC. The 27 MHz clock that is the reference of the output system, is input to this board while the horizontal sync, vertical sync and field identification signals that are generated by the VPR-019 board is input to this board where encoding is performed.

The internal parameters that set the NTSC/PAL selection, the field polarity, display during blanking period and others, are input from IC32 or IC33 through serial interface.

The digitally encoded video signal is converted by the DA converter inside the IC and is output as the analog Y and C signals.

3-21-10. Video Signal Output Block (schematic diagram 8/8)

The DA-converted Y and C signals pass through the low-pass filters to suppress occurrence of aliasing. The low-pass filters for Y and C signals have the same frequency response characteristics. The Y and C signals are amplified by video amplifier and 75-ohm driver, and are output to outside as "GRAPHICS Y/C OUT."

3-21-11. RGB Signal Output Block (schematic diagram 8/8)

The R, G and B input signals that are amplified by video amplifier and 75-ohm driver are output to outside as "RGB MONITOR OUT" while the input H. sync and the V. sync signals are passed through and are directly output to outside as "RGB MONITOR OUT", for the purpose of displaying the VGA and SVGA signals that are input to "RGB IN", directly on monitor screen.

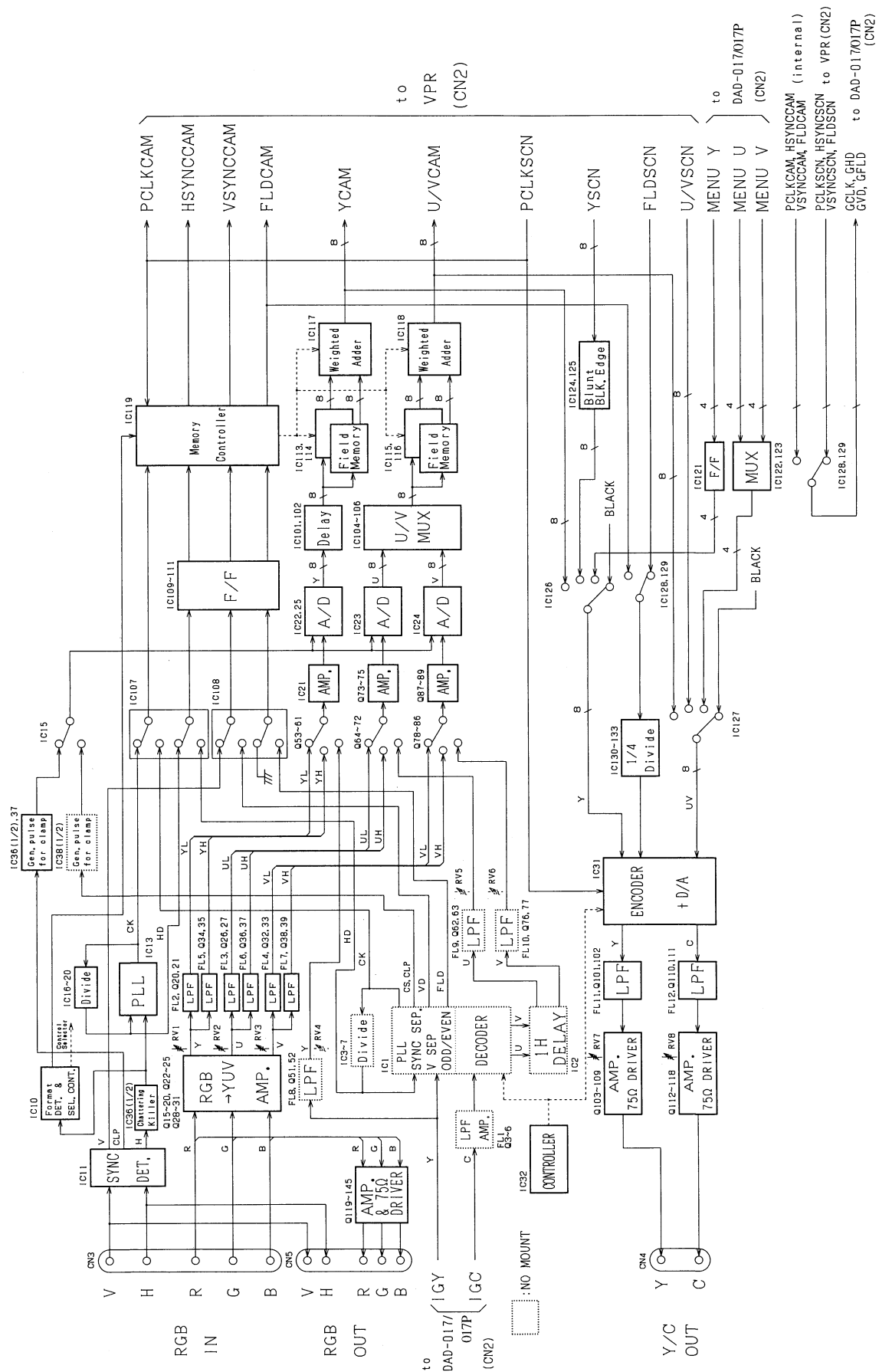


Fig. 3-21-1 DAD-33/33P Block diagram

3-22. DAD-33/33P BOARD TROUBLESHOOTING

[Equipment required]

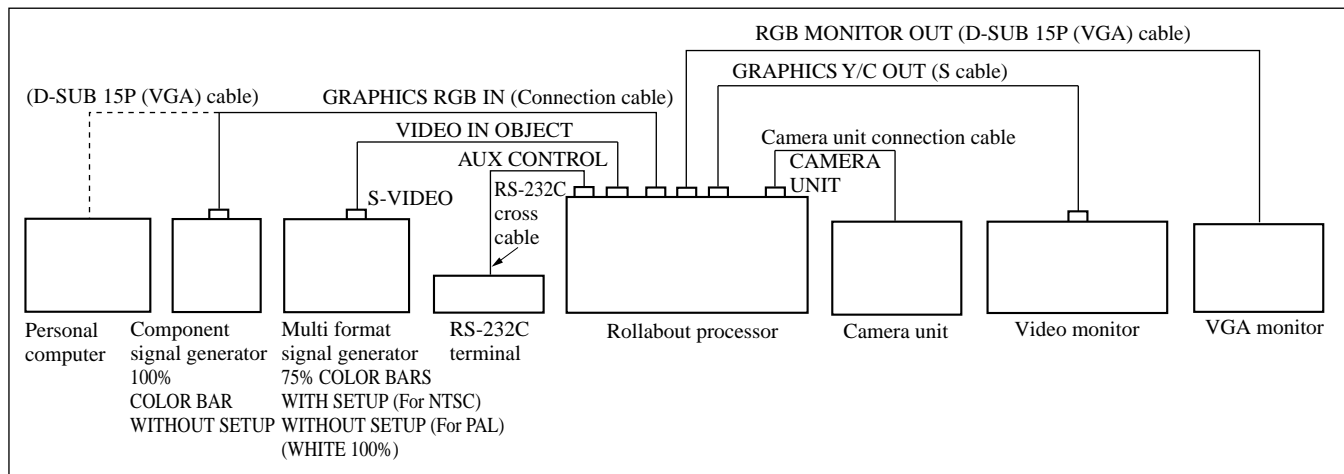
- PCS-5100/5100P system
 - (Rollabout processor (PCS-P500/P500P)
 - (Camera unit (PCS-C300/C300P)
 - (Audio unit (PCS-A500/A510)
 - (Remote commander (PCS-R500)
- Signal generator (Tektronix TSG130A for NTSC, TSG131A for PAL or equivalent)
- Component signal generator (Tektronix TSG300, Leader LT1610A or equivalent)
- Personal computer (PC/AT compatible machine, 640×480 or 800×600)
- Oscilloscope
- Video monitor
- VGA monitor (multi-scan)
- Camera unit connection cable (supplied accessory)
- Audio unit connection cable (supplied accessory)

[Service tools]

- VH-950 extension board (Sony part number: J-6389-500-A)
- Connection cable (Sony part number: 1-590-226-11)
- RS-232C terminal (PC/AT compatible machine with communication software "CCT")
- RS-232C cross cable
- D-sub 15pins (VGA) cable (2 cables)
- S cable

[Preparation]

- 1) Set up the PCS-5100/5100P system to the normal operating condition.
- 2) Insert the extension board to the slot of the DAD-33/33P board.
- 3) Insert the DAD-33/33P board to the extension board.
- 4) Make connection as shown below.
- 5) Start up the communication software "CCT" which is installed in the terminal. Turn on the main power of the PCS-5100/5100P system (enter the debug mode).
- 6) Turn on the main power from the remote commander (PCS-R500).



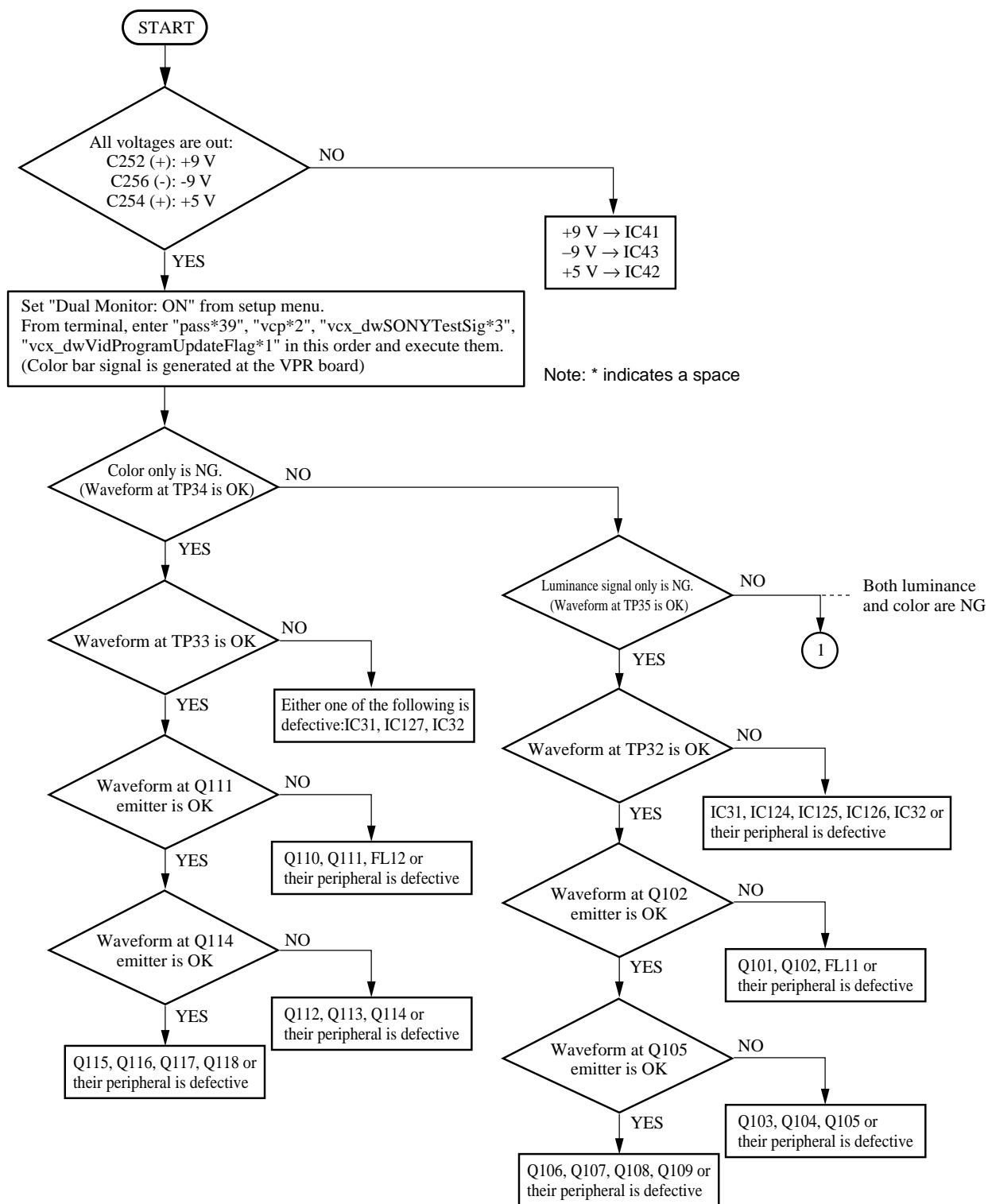
3-22-1. Flow Chart

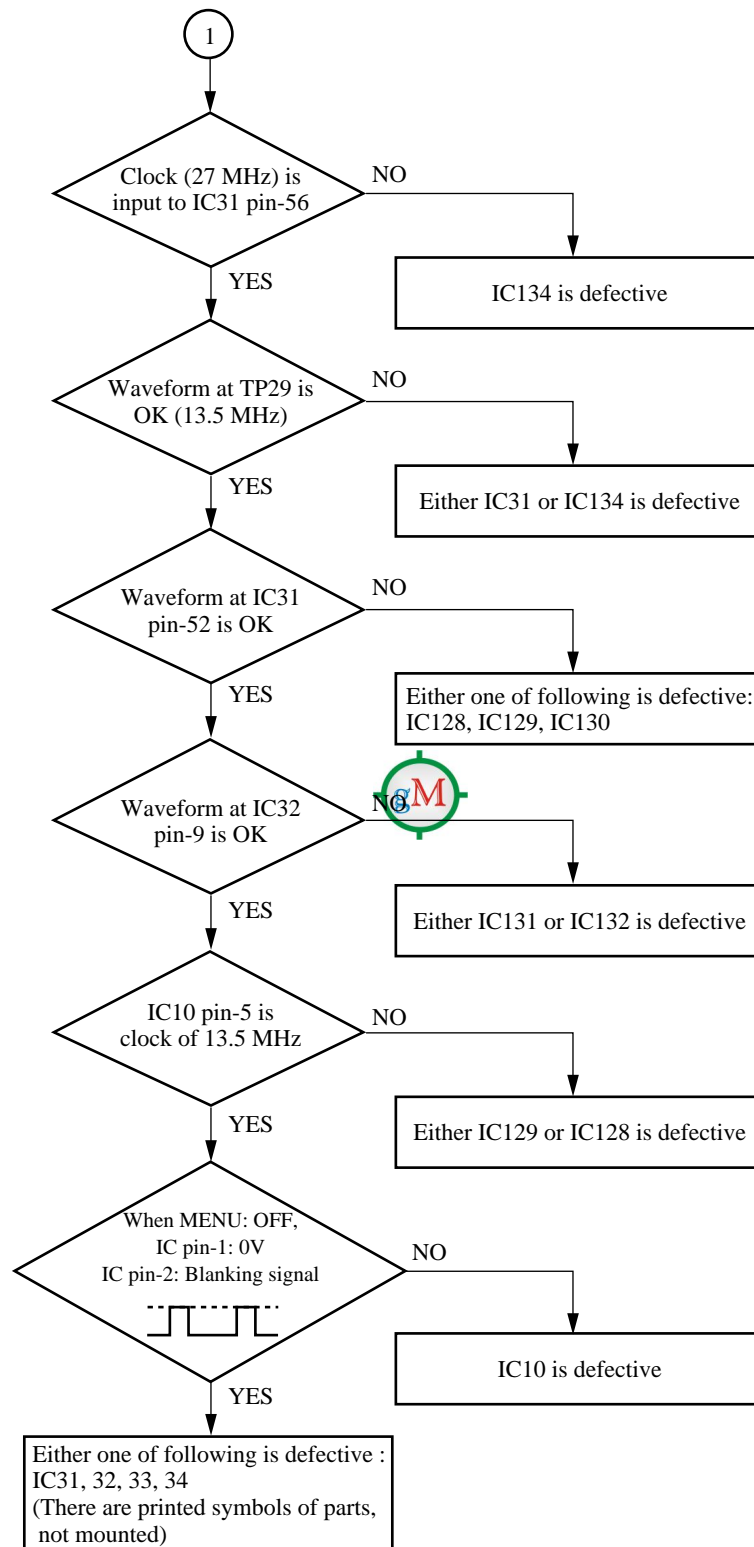
First, check which of the following four symptoms your trouble corresponds to, then proceed to the respective flow chart.

(Symptom 1: Page 3-147, Symptom 2: Page 3-149, Symptom 3: Page 3-153, Symptom 4: Page 3-154)

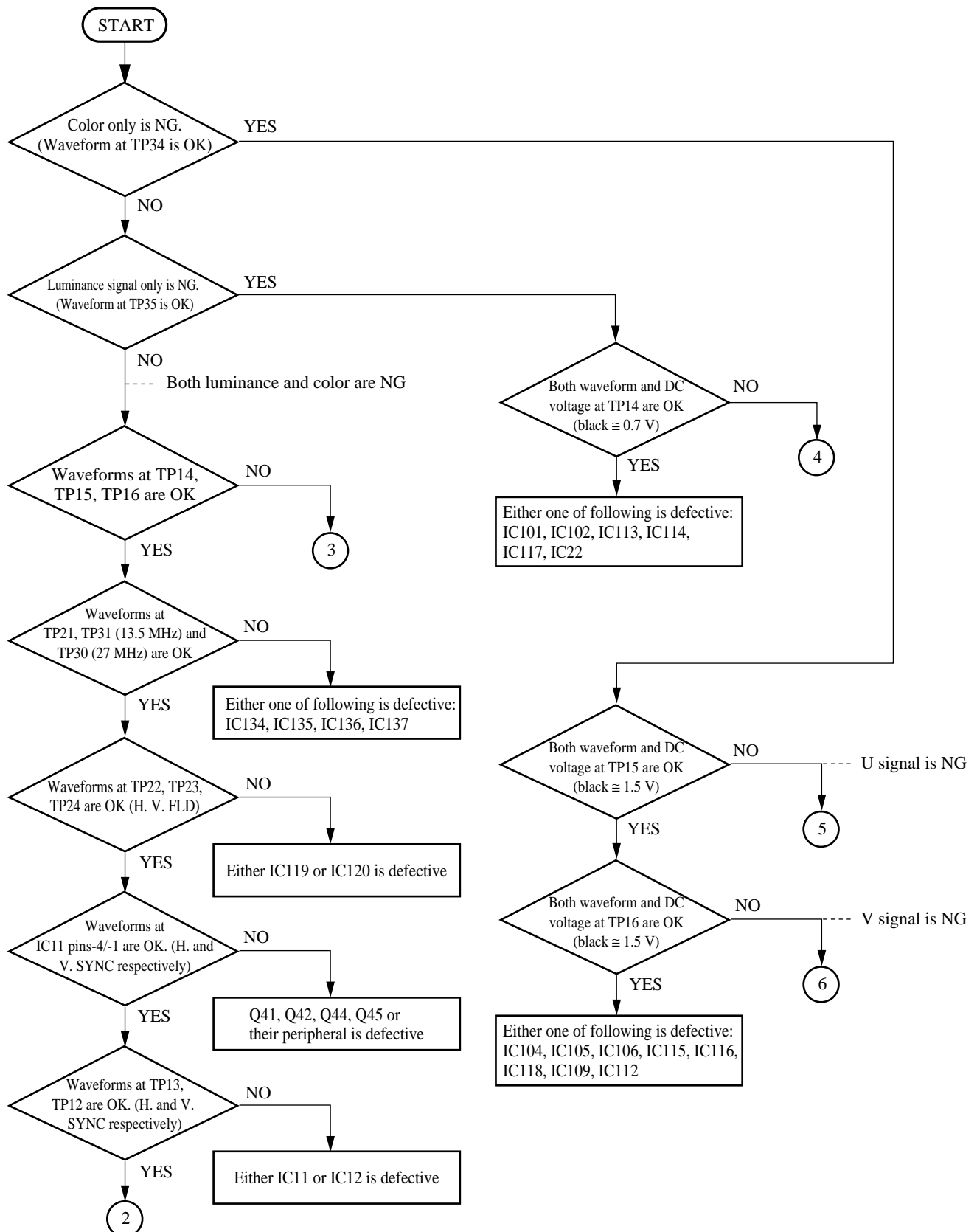
1. The GRAPHICS Y/C OUT display in dual mode is abnormal.

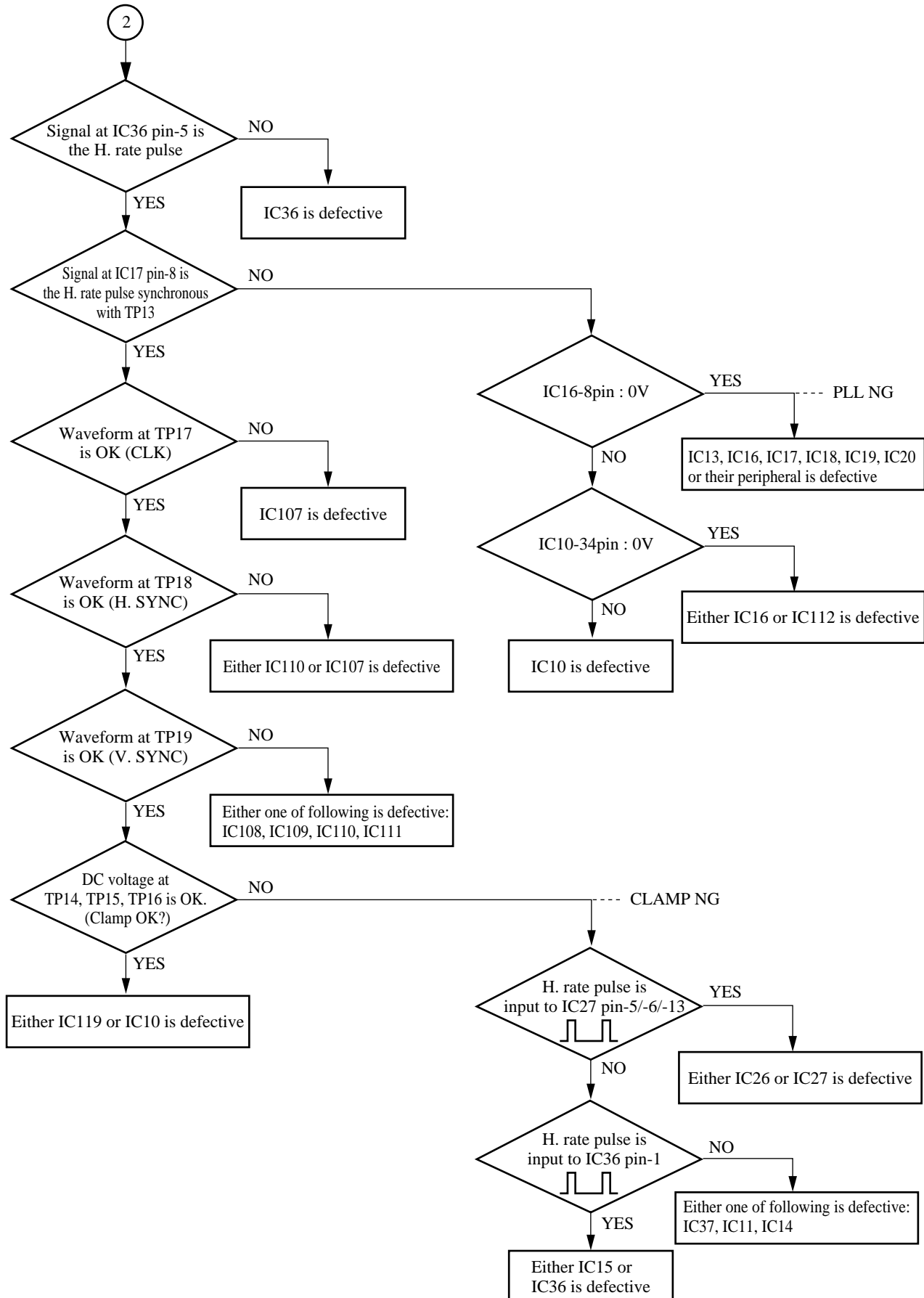
(When an input is connected to either CAMERA UNIT or VIDEO IN (OBJECT) or VIDEO IN (AUX1) or VIDEO IN (AUX2))

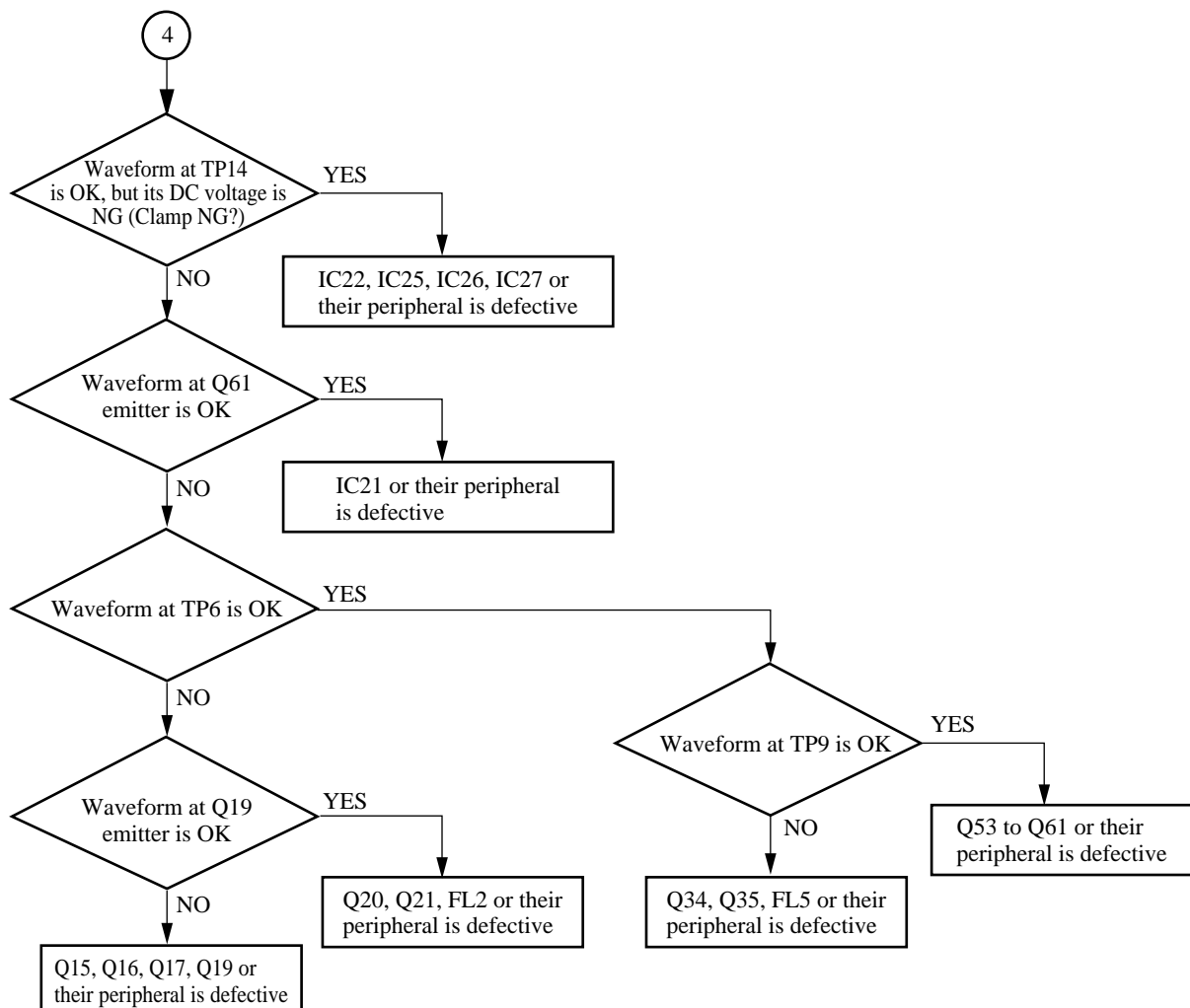
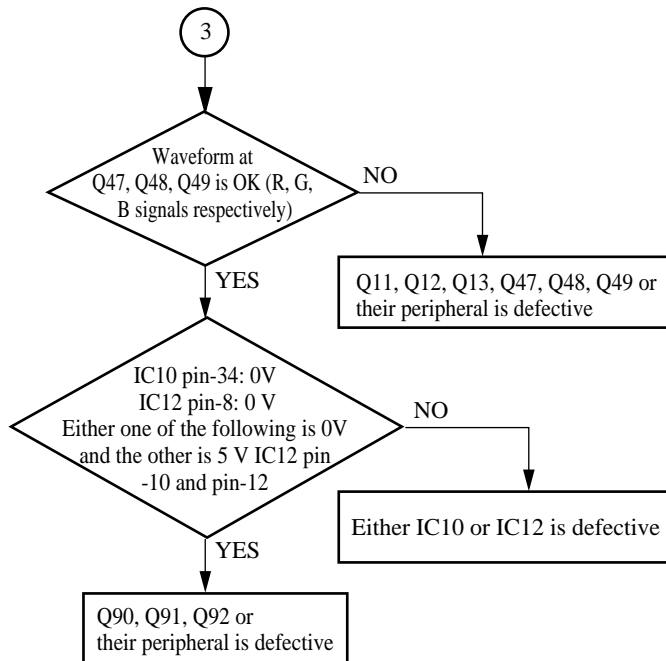


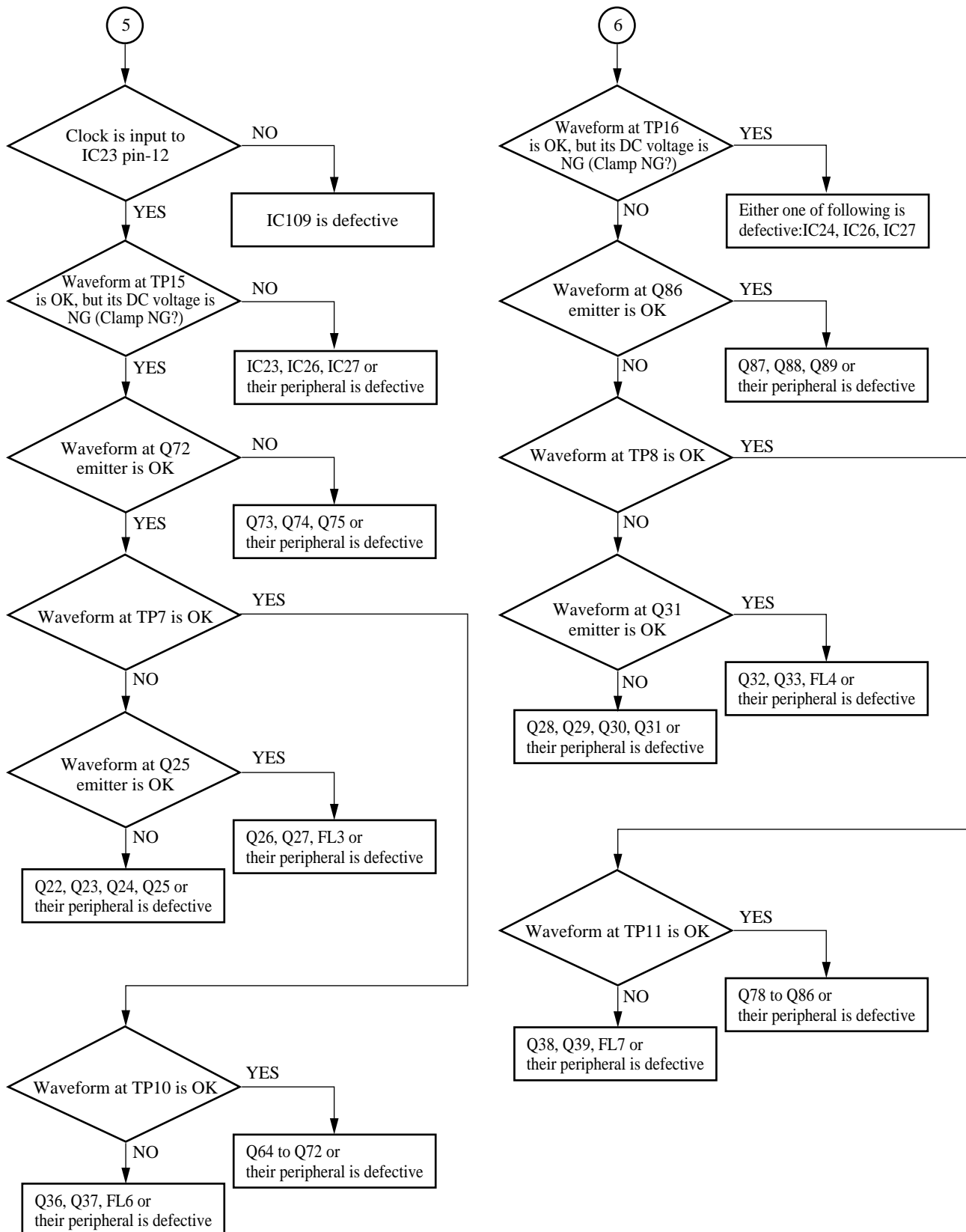


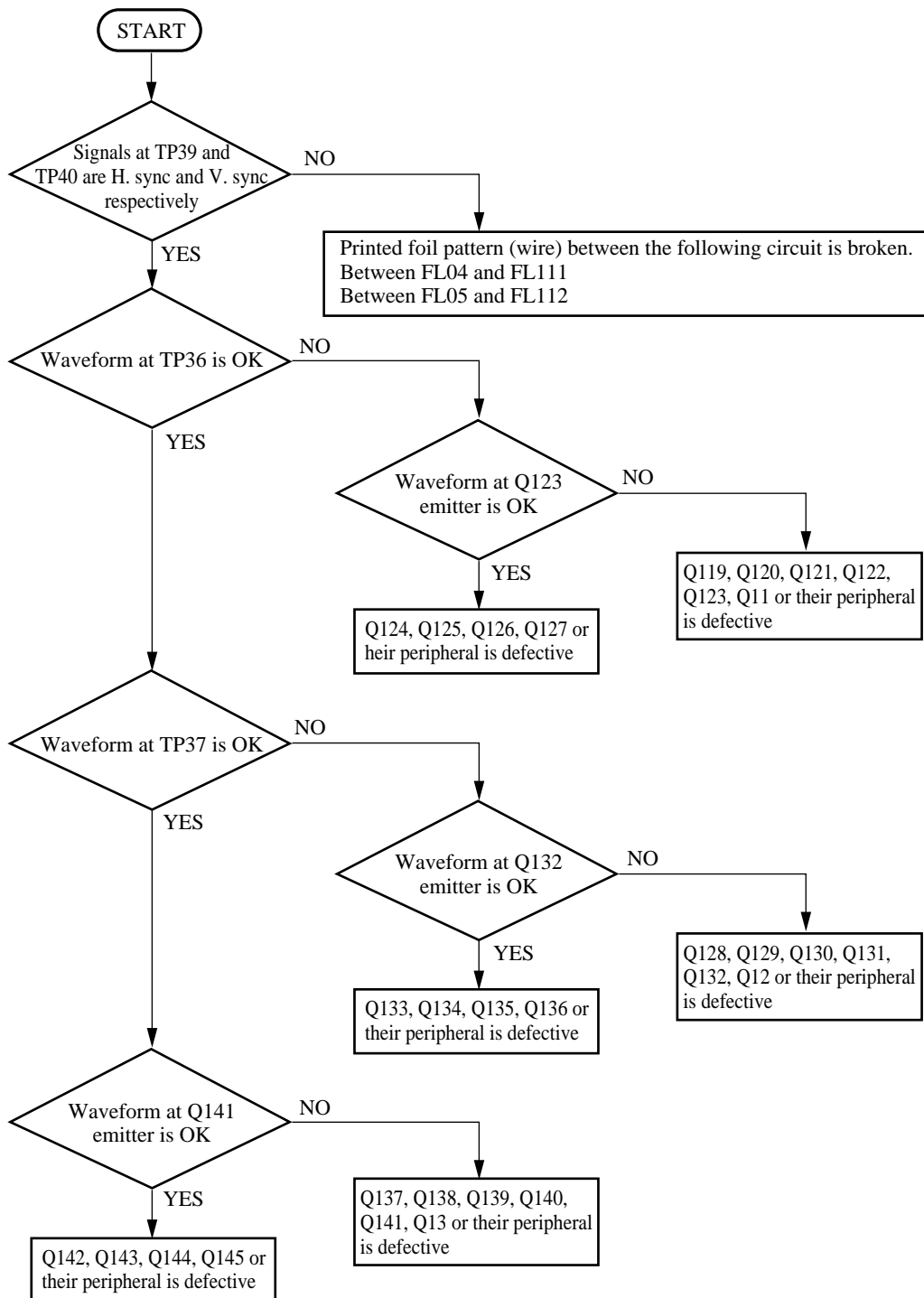
2. The video picture is abnormal when the RGB input is selected.
(Video picture has no problems when any other input is selected.)

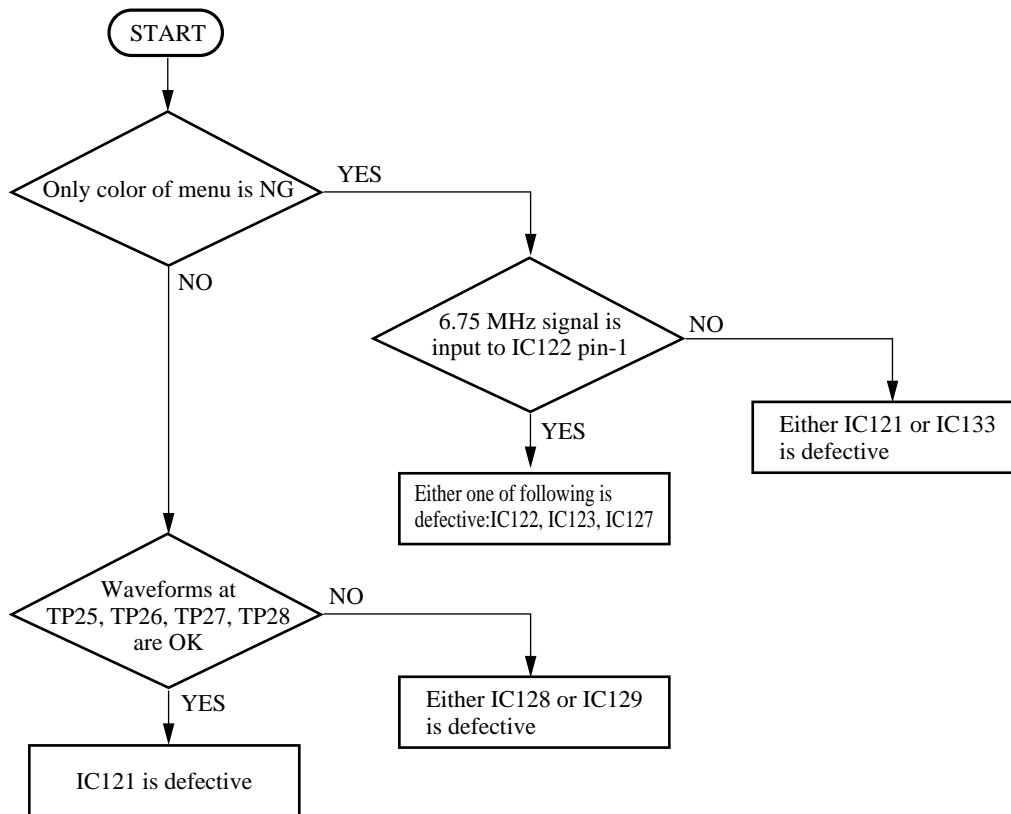








3. The RGB MONITOR OUT display is abnormal.

4. The GRAPHICS Y/C OUT display is abnormal when the menu is displayed (during DRAW mode).

4-6. DAD-33 BOARD ADJUSTMENT (PCS-G510)

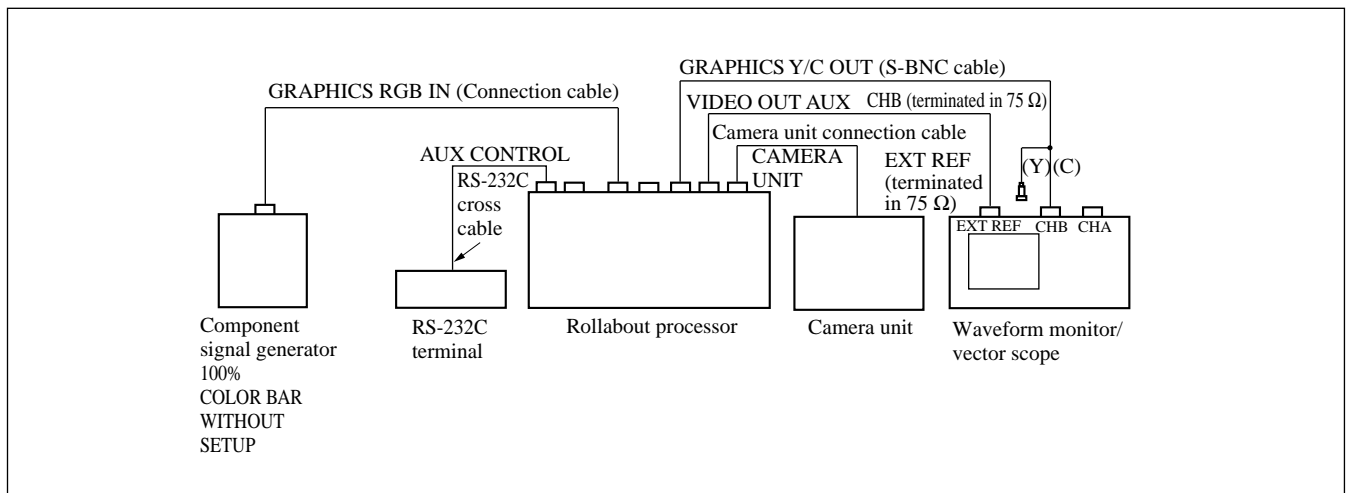
[Equipment required]

- PCS-5100/5100P system
 - Rollabout processor (PCS-P500/P500P)
 - Camera unit (PCS-C300/C300P)
 - Remote commander (PCS-R500)
- Component signal generator (Tektronix TSG300, Leader LT1610A or equivalent)
- Oscilloscope
- Waveform monitor/vector scope (Tektronix 1780 for NTSC, 1781 for PAL or equivalent)
- Camera unit connection cable (supplied accessory)

[Service tools]

- VH-950 extension board (Sony part number: J-6389-500-A)
- S-BNC video cable (Sony part number: J-6381-380-A)
- Connection cable (Sony part number: 1-590-226-11)
- S cable
- RS-232C terminal (PC/AT compatible machine with communication software "CCT")
- RS-232C cross cable

[Connection]



[Preparation]

- 1) Connect a camera unit (PCS-C300/C300P) to the rollabout processor (PCS-P500/P500P) and perform the setups for the normal operating condition.
- 2) Insert the extension board to the slot of DAD-33/33P board.
- 3) Insert the DAD-33/33P board to the extension board.
- 4) Make connection as shown above.
- 5) Start up the communication software "CCT" which is installed in the RS-232C terminal, then turn on the main power of the PCS-5100/5100P system.
- 6) Turn on the main power from the remote commander (PCS-R500).

[Command list for DAD-33/33P board adjustment]

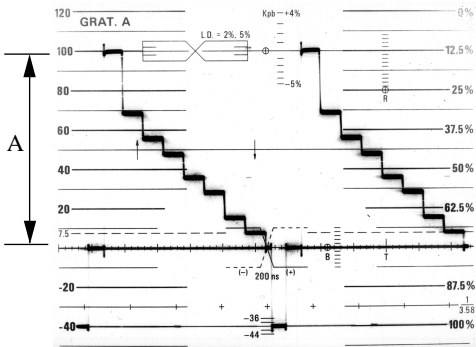
The following commands must be input from the RS-232C terminal in the following adjustment procedure.

(↵ indicates execution and * indicates a space.)

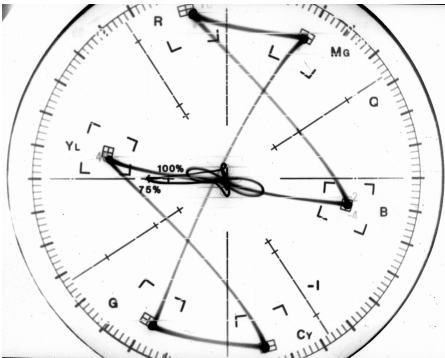
```
Command A:  p a s s * 3 9 ↵
              v c p * 2 ↵
              v c x _ d w S O N Y T e s t S i g * 3 (NTSC), v c x _ d w S O N Y T e s t S i g * 5 (PAL) ↵
              v c x _ d w V i d P r o g r a m U p d a t e F l a g * 1 ↵
```

```
Command B:  o u t * 2 a 2 , e 0 ↵
```

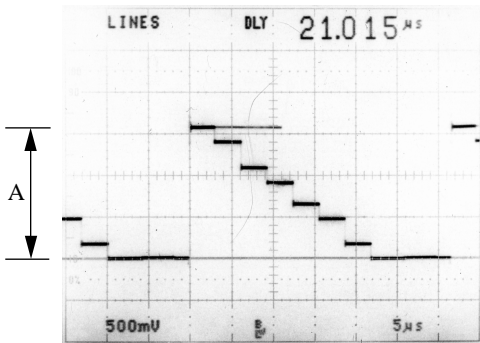
4-6-1. S OUT Y Level Adjustment

Adjustment condition	Specification	Adjustment point
<ul style="list-style-type: none">Enter the dual monitor mode using a remote commander. (Click “OTHER”, “SETUP” and “PERIPHERAL”, and set “DUAL MONITOR” to ON.)Input the command A from the RS-232C terminal.	<p>VIDEO OUT Y/C (Y)</p>  <p>A=100±1 IRE (NTSC)</p>	● RV7/DAD-33 (F-3)

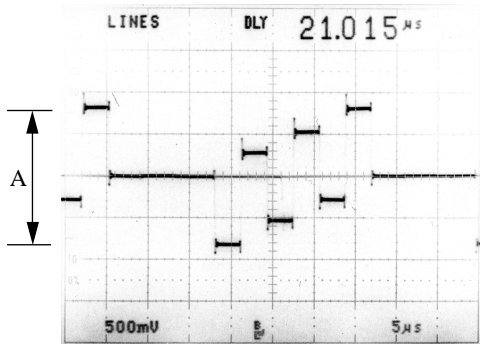
4-6-2. S OUT C Level Adjustment

Adjustment condition	Specification	Adjustment point
(Execution of the command A is continued.)	<p>GRAPHICS Y/C OUT (C)</p>  <p>The respective spots must be positioned within the specified “田” zones.</p>	● RV8/DAD-33 (F-3)

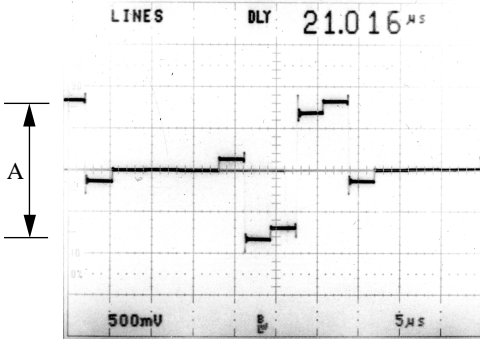
4-6-3. RGB IN Y Level Adjustment

Adjustment condition	Specification	Adjustment point
Input the command B from the RS-232C terminal. TRIG : TP13/DAD-33 (E-2)	TP14/DAD-33 (C-2)  $A=1.60\pm0.05\text{ V}$	● RV1/DAD-33 (F-2)

4-6-4. RGB IN U Level Adjustment

Adjustment condition	Specification	Adjustment point
(Execution of the command B is continued.) TRIG : TP13/DAD-33 (E-2)	TP15/DAD-33 (B-2)  $A=1.65\pm0.05\text{ V}$	● RV2/DAD-33 (F-2)

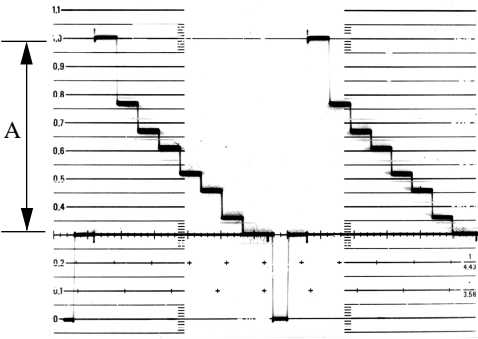
4-6-5. RGB IN V Level Adjustment

Adjustment condition	Specification	Adjustment point
(Execution of the command B is continued.) TRIG : TP13/DAD-33 (E-2)	TP16/DAD-33 (B-2)  $A=1.65\pm0.05\text{ V}$	● RV3/DAD-33 (F-1)

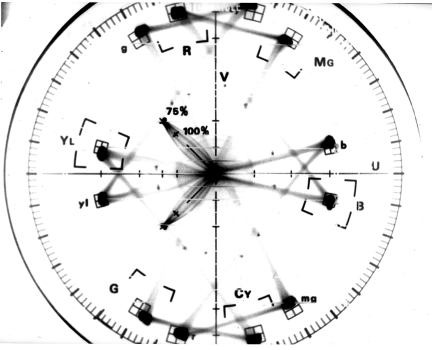
4-7. DAD-33P BOARD ADJUSTMENT (PCS-G510P)

For [Equipment required], [Service tools], [Connection], [Preparation] and [Command list for DAD-33/33P board adjustment], refer to section 4-6.

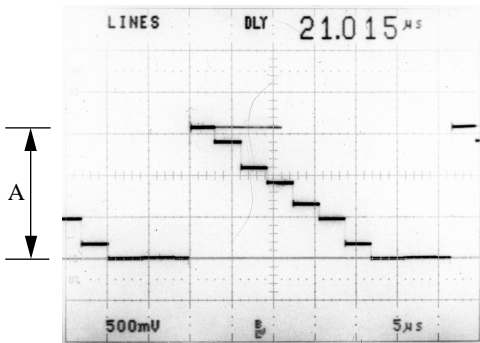
4-7-1. S OUT Y Level Adjustment

Adjustment condition	Specification	Adjustment point
<ul style="list-style-type: none">Enter the dual monitor mode using a remote commander. (Click “OTHER”, “SETUP” and “PERIPHERAL”, and set “DUAL MONITOR” to ON.)Input the command A from the RS-232C terminal.	<p>VIDEO Y/C OUT (Y)</p>  <p>$A=700\pm7\text{ mV}$</p>	<p>● RV7/DAD-33P (F-2)</p>

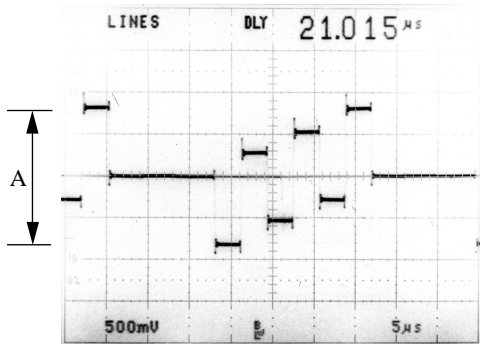
4-7-2. S OUT C Level Adjustment

Adjustment condition	Specification	Adjustment point
(Execution of the command A is continued.)	<p>GRAPHICS Y/C OUT (C)</p>  <p>The respective spots must be positioned within the specified “田” zones.</p>	<p>● RV8/DAD-33P (E-3)</p>

4-7-3. RGB IN Y Level Adjustment

Adjustment condition	Specification	Adjustment point
Input the command B from the RS-232C terminal. TRIG : TP13/DAD-33P (E-2)	TP14/DAD-33P (C-2)  $A=1.60\pm0.05\text{ V}$	● RV1/DAD-33P (F-2)

4-7-4. RGB IN U Level Adjustment

Adjustment condition	Specification	Adjustment point
(Execution of the command B is continued.) TRIG : TP13/DAD-33P (E-2)	TP15/DAD-33P (B-2)  $A=1.65\pm0.05\text{ V}$	● RV2/DAD-33P (F-2)

4-7-5. RGB IN V Level Adjustment

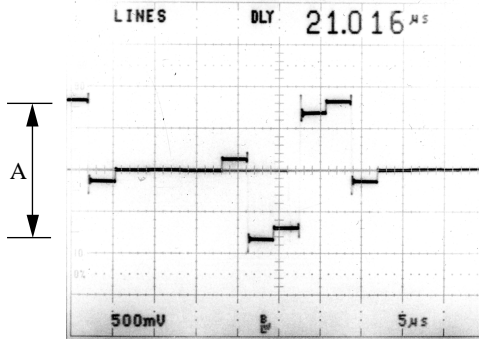
Adjustment condition	Specification	Adjustment point
(Execution of the command B is continued.) TRIG : TP13/DAD-33P (E-2)	TP16/DAD-33P (B-2)  $A=1.65\pm0.05\text{ V}$	● RV3/DAD-33P (F-1)

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Volume 1 (E)

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APR-011A BOARD(PCS-P500/P500P)

(APR-011A BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
1pc	A-8319-582-A	o MOUNTED CIRCUIT BOARD, APR-011A
1pc	3-179-084-01	s LEVER (R), PC BOARD
1pc	7-682-947-01	s SCREW +PSW 3X6
C101	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C102	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C103	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C106	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C110	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C111	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C112	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C113	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C119	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C150	1-135-177-21	s TANTALUM, CHIP 1uF 10% 25V
C151	1-135-177-21	s TANTALUM, CHIP 1uF 10% 25V
C152	1-135-177-21	s TANTALUM, CHIP 1uF 10% 25V
C153	1-135-177-21	s TANTALUM, CHIP 1uF 10% 25V
C154	1-135-177-21	s TANTALUM, CHIP 1uF 10% 25V
C155	1-135-177-21	s TANTALUM, CHIP 1uF 10% 25V
C156	1-113-500-11	s TANTALUM, CHIP 100uF 20% 10V
C157	1-113-500-11	s TANTALUM, CHIP 100uF 20% 10V
C158	1-113-500-11	s TANTALUM, CHIP 100uF 20% 10V
C202	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C203	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C204	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C205	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C206	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C210	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C211	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C212	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C213	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C214	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C215	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C216	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C217	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C218	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C220	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C221	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C222	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C223	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C224	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C225	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C226	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C227	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C228	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C230	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C232	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C233	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C234	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C235	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C236	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C237	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C238	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C239	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C300	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C302	1-162-921-11	s CERAMIC, CHIP 33PF 5% 50V
C303	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C309	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C310	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V

Ref. No. or Q'ty	Part No.	SP Description
C311	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C321	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C322	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C323	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C324	1-162-966-11	s CERAMIC, CHIP 0.0022uF 10% 50V
C325	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C330	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C338	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C339	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C340	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C341	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C342	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C343	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C344	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C345	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C346	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C347	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C348	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C349	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C350	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C351	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C352	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C353	1-162-970-11	s CERAMIC, CHIP 0.01uF 10% 25V
C354	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C401	1-126-397-11	s ELECT, CHIP 33uF 20% 25V
C402	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C403	1-126-397-11	s ELECT, CHIP 33uF 20% 25V
C404	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C405	1-126-397-11	s ELECT, CHIP 33uF 20% 25V
C407	1-126-397-11	s ELECT, CHIP 33uF 20% 25V
C408	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C409	1-126-397-11	s ELECT, CHIP 33uF 20% 25V
C410	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C411	1-104-913-11	s TANTALUM, CHIP 10uF 20% 16V
C412	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C413	1-126-397-11	s ELECT, CHIP 33uF 20% 25V
C414	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C415	1-104-913-11	s TANTALUM, CHIP 10uF 20% 16V
C416	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C426	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C427	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C428	1-164-217-11	s CERAMIC, CHIP 150PF 5% 50V
C429	1-164-217-11	s CERAMIC, CHIP 150PF 5% 50V
C433	1-126-397-11	s ELECT, CHIP 33uF 20% 25V
C434	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C436	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C437	1-126-397-11	s ELECT, CHIP 33uF 20% 25V
C438	1-126-398-11	s ELECT, CHIP 4.7uF 20% 35V
C443	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C444	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C445	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C446	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C447	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C448	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C449	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C450	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C452	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C453	1-126-397-11	s ELECT, CHIP 33uF 20% 25V
C460	1-126-394-11	s ELECT, CHIP 10uF 20% 16V

4 (PCS-5100/5100P-J, E)

(APR-011A BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
C461	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C462	1-164-227-11	s CERAMIC, CHIP 0.022uF 10% 25V
C478	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C479	1-126-397-11	s ELECT, CHIP 33uF 20% 25V
C483	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C484	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C485	1-164-227-11	s CERAMIC, CHIP 0.022uF 10% 25V
C491	1-126-398-11	s ELECT, CHIP 4.7uF 20% 35V
C496	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C531	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C532	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C533	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C534	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C551	1-162-961-11	s CERAMIC, CHIP 330PF 10% 50V
C552	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C601	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C602	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C603	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C604	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C607	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C608	1-126-397-11	s ELECT, CHIP 33uF 20% 25V
C609	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C610	1-126-397-11	s ELECT, CHIP 33uF 20% 25V
C700	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C701	1-126-405-11	s ELECT, CHIP 10uF 20% 50V
C702	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C703	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C704	1-126-405-11	s ELECT, CHIP 10uF 20% 50V
C705	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C706	1-126-405-11	s ELECT, CHIP 10uF 20% 50V
C707	1-115-416-11	s CERAMIC 1000PF 5% 25V
C708	1-115-416-11	s CERAMIC 1000PF 5% 25V
C709	1-115-416-11	s CERAMIC 1000PF 5% 25V
C710	1-115-416-11	s CERAMIC 1000PF 5% 25V
C711	1-126-398-11	s ELECT, CHIP 4.7uF 20% 35V
C712	1-126-398-11	s ELECT, CHIP 4.7uF 20% 35V
C713	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C714	1-126-405-11	s ELECT, CHIP 10uF 20% 50V
C715	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
CN101	1-580-195-21	s CONNECTOR, PHEC 100P, FEMALE
CN102	1-774-777-21	s CONNECTOR, BB 40P, FEMALE
CN103	1-691-551-11	o CONNECTOR (SMD) 8P, MALE
CN403	1-562-941-11	s JACK, PIN 1P, FEMALE
CN404	1-562-941-11	s JACK, PIN 1P, FEMALE
CN405	1-562-941-11	s JACK, PIN 1P, FEMALE
D401	8-719-800-76	s DIODE 1SS226
D402	8-719-800-76	s DIODE 1SS226
D404	8-719-158-35	s DIODE RD9.1SB-T1
D405	8-719-158-35	s DIODE RD9.1SB-T1
D406	8-719-158-35	s DIODE RD9.1SB-T1
D407	8-719-158-35	s DIODE RD9.1SB-T1
D408	8-719-158-35	s DIODE RD9.1SB-T1
D409	8-719-158-35	s DIODE RD9.1SB-T1
FL401	1-233-323-31	s FILTER, CHIP EMI
FL402	1-233-323-31	s FILTER, CHIP EMI
FL403	1-233-323-31	s FILTER, CHIP EMI
IC101	8-759-491-36	s IC TC74VHCT244AF(EL)

(APR-011A BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
IC102	8-759-491-36	s IC TC74VHCT244AF(EL)
IC103	8-759-491-37	s IC TC74VHCT245AF(EL)
IC110	8-759-557-30	o IC ISPLSI2032-80LT44-RAP11V1
IC111	8-759-491-39	s IC TC74VHCT374AF(EL)
IC112	8-759-491-41	s IC TC74VHCT541AF(EL)
IC113	8-759-491-41	s IC TC74VHCT541AF(EL)
IC120	8-759-491-31	s IC TC74VHCT00AF(EL)
IC150	8-759-426-95	s IC L88MS33T-TL
IC151	8-759-426-95	s IC L88MS33T-TL
IC152	8-759-426-95	s IC L88MS33T-TL
IC202	8-759-392-79	s IC SN74LVC245APW-E05
IC203	8-759-451-76	s IC SN74LVC244APW-E05
IC204	8-759-451-76	s IC SN74LVC244APW-E05
IC205	8-759-451-76	s IC SN74LVC244APW-E05
IC206	8-759-451-76	s IC SN74LVC244APW-E05
IC210	8-759-543-90	s IC UPD77019GC-015-9EU
IC220	8-759-543-90	s IC UPD77019GC-015-9EU
IC230	8-759-543-90	s IC UPD77019GC-015-9EU
IC300	8-759-080-91	s IC MM74HC4046MX
IC310	8-759-565-31	s IC ISPLSI2032-80LT44-RAP12V2
IC320	8-759-561-83	s IC XC56303PV80
IC321	8-759-529-45	s IC IDT71V256SA15PZ-TL
IC322	8-759-529-45	s IC IDT71V256SA15PZ-TL
IC323	8-759-529-45	s IC IDT71V256SA15PZ-TL
IC401	8-759-372-29	s IC HA178L09UA-TL
IC402	8-759-372-30	s IC HA179L09U-TL
IC403	8-759-323-82	s IC HA178L05UA-TL
IC404	8-759-323-82	s IC HA178L05UA-TL
IC405	8-759-973-71	s IC TL7705CPS-B
IC406	8-759-233-73	s IC TC74HCT244AF(EL)
IC407	8-759-553-67	s IC UPC4574G2-E2
IC409	8-759-553-67	s IC UPC4574G2-E2
IC504	8-759-491-36	s IC TC74VHCT244AF(EL)
IC700	8-759-349-37	s IC AK4510-VS-E2
IC701	8-759-491-36	s IC TC74VHCT244AF(EL)
JC1	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC102	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC103	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC104	1-216-864-11	s METAL, CHIP 0 5% 1/16W
L401	1-410-389-31	s INDUCTOR CHIP 47UH
Q401	8-729-141-48	s TRANSISTOR 2SB624-BV345
Q402	8-729-141-48	s TRANSISTOR 2SB624-BV345
Q403	8-729-141-48	s TRANSISTOR 2SB624-BV345
Q404	8-729-141-48	s TRANSISTOR 2SB624-BV345
Q405	8-729-216-22	s TRANSISTOR 2SA1162
Q406	8-729-216-22	s TRANSISTOR 2SA1162
Q407	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q408	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
R100	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R120	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R201	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R210	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R211	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R212	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R214	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R215	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R216	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R219	1-216-845-11	s METAL, CHIP 100K 5% 1/16W

(APR-011A BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
R220	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R221	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R222	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R224	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R225	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R226	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R229	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R230	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R231	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R232	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R234	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R235	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R236	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R237	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R239	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R300	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R301	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R302	1-216-818-11	s METAL, CHIP 560 5% 1/16W
R303	1-216-828-11	s METAL, CHIP 3.9K 5% 1/16W
R304	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R305	1-216-818-11	s METAL, CHIP 560 5% 1/16W
R306	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R310	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R311	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R312	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R313	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R314	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R315	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R316	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R317	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R320	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R321	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R322	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R323	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R324	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R325	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R326	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R327	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R328	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R329	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R330	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R341	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R342	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R351	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R352	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R400	1-216-843-11	s METAL, CHIP 68K 5% 1/16W
R402	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R403	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R415	1-216-849-11	s METAL, CHIP 220K 5% 1/16W
R416	1-216-849-11	s METAL, CHIP 220K 5% 1/16W
R421	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R422	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R423	1-216-847-11	s METAL, CHIP 150K 5% 1/16W
R424	1-216-847-11	s METAL, CHIP 150K 5% 1/16W
R425	1-216-843-11	s METAL, CHIP 68K 5% 1/16W
R426	1-216-843-11	s METAL, CHIP 68K 5% 1/16W
R427	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R442	1-216-843-11	s METAL, CHIP 68K 5% 1/16W
R443	1-216-847-11	s METAL, CHIP 150K 5% 1/16W

(APR-011A BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
R444	1-216-843-11	s METAL, CHIP 68K 5% 1/16W
R445	1-216-847-11	s METAL, CHIP 150K 5% 1/16W
R446	1-216-847-11	s METAL, CHIP 150K 5% 1/16W
R447	1-216-843-11	s METAL, CHIP 68K 5% 1/16W
R448	1-216-847-11	s METAL, CHIP 150K 5% 1/16W
R449	1-216-847-11	s METAL, CHIP 150K 5% 1/16W
R450	1-216-847-11	s METAL, CHIP 150K 5% 1/16W
R451	1-216-847-11	s METAL, CHIP 150K 5% 1/16W
R457	1-216-847-11	s METAL, CHIP 150K 5% 1/16W
R458	1-216-847-11	s METAL, CHIP 150K 5% 1/16W
R460	1-216-843-11	s METAL, CHIP 68K 5% 1/16W
R463	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R464	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R465	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R467	1-216-849-11	s METAL, CHIP 220K 5% 1/16W
R468	1-216-849-11	s METAL, CHIP 220K 5% 1/16W
R469	1-216-818-11	s METAL, CHIP 560 5% 1/16W
R470	1-216-818-11	s METAL, CHIP 560 5% 1/16W
R471	1-216-818-11	s METAL, CHIP 560 5% 1/16W
R472	1-216-818-11	s METAL, CHIP 560 5% 1/16W
R473	1-216-818-11	s METAL, CHIP 560 5% 1/16W
R474	1-216-818-11	s METAL, CHIP 560 5% 1/16W
R475	1-216-818-11	s METAL, CHIP 560 5% 1/16W
R476	1-216-818-11	s METAL, CHIP 560 5% 1/16W
R477	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R478	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R494	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R495	1-216-849-11	s METAL, CHIP 220K 5% 1/16W
R496	1-216-849-11	s METAL, CHIP 220K 5% 1/16W
R497	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R498	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R499	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R500	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R503	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R505	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R509	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R510	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R511	1-216-847-11	s METAL, CHIP 150K 5% 1/16W
R512	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R517	1-216-847-11	s METAL, CHIP 150K 5% 1/16W
R518	1-216-849-11	s METAL, CHIP 220K 5% 1/16W
R527	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R530	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R535	1-216-843-11	s METAL, CHIP 68K 5% 1/16W
R536	1-216-847-11	s METAL, CHIP 150K 5% 1/16W
R537	1-216-843-11	s METAL, CHIP 68K 5% 1/16W
R539	1-216-834-11	s METAL, CHIP 12K 5% 1/16W
R545	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R546	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R547	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R700	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R701	1-216-825-11	s METAL, CHIP 2.2K 5% 1/16W
R702	1-216-825-11	s METAL, CHIP 2.2K 5% 1/16W
R703	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
RB100	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB101	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB102	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB103	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB104	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4

6 (PCS-5100/5100P-J, E)

(APR-011A BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
RB105	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB106	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB107	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB108	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB109	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB110	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB111	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB112	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB113	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB114	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB115	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB116	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB117	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB118	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB119	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB120	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB121	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB122	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB200	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB201	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB210	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB211	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB212	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB213	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB220	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB221	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB222	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB223	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB230	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB231	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB232	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB233	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB320	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB321	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB322	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB323	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB324	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB325	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB326	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB700	1-239-412-11	s RESISTOR BLOCK, CHIP 100x4
RB701	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB702	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
S102	1-692-271-31	s SWITCH, SLIDE
X200	1-781-076-11	s CRYSTAL 7.500MHz

CPU-202 BOARD(PCS-P500/P500P)

Ref. No. or Q'ty	Part No.	SP Description
1pc	A-8272-636-C	o MOUNTED CIRCUIT BOARD, CPU-202
1pc	7-621-255-65	s SCREW +P 2X10
1pc	7-621-259-55	s SCREW +P 2.6X8
1pc	7-622-205-05	s NUT M2 TYPE2
1pc	7-682-947-01	s SCREW +PSW 3X6
1pc	8-759-460-61	s IC PALCE16V8H-15SC/4
1pc	2-832-007-00	s BUSHING (K), INSULATING
BZ1	1-529-025-00	s BUZZER
C5	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C6	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C7	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C8	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C9	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C10	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C11	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C12	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C13	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C14	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C15	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C16	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C17	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C18	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C19	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C20	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C21	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C22	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C23	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C24	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C25	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C26	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C27	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C28	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C29	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C30	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C31	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C32	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C33	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C35	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C36	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C37	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C38	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C39	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C40	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C41	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C42	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C43	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C46	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C47	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C48	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C49	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C50	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C51	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C52	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C54	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C55	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C57	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C58	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C59	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V

(CPU-202 BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
C60	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C61	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C70	1-162-919-11 s	CERAMIC, CHIP 22PF 5% 50V
C71	1-162-919-11 s	CERAMIC, CHIP 22PF 5% 50V
C72	1-162-919-11 s	CERAMIC, CHIP 22PF 5% 50V
C73	1-162-919-11 s	CERAMIC, CHIP 22PF 5% 50V
C74	1-162-923-11 s	CERAMIC, CHIP 47PF 5% 50V
C75	1-162-915-11 s	CERAMIC, CHIP 10PF 50V
C76	1-162-917-11 s	CERAMIC, CHIP 15PF 5% 50V
C78	1-162-919-11 s	CERAMIC, CHIP 22PF 5% 50V
C79	1-162-919-11 s	CERAMIC, CHIP 22PF 5% 50V
C80	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C81	1-107-688-11 s	TANTALUM, CHIP 1.5uF 20% 10V
C82	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C83	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C90	1-126-395-11 s	ELECT, CHIP 22uF 20% 16V
C91	1-126-395-11 s	ELECT, CHIP 22uF 20% 16V
C92	1-126-397-11 s	ELECT, CHIP 33uF 20% 25V
C93	1-126-397-11 s	ELECT, CHIP 33uF 20% 25V
C99	1-126-395-11 s	ELECT, CHIP 22uF 20% 16V
C110	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C111	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
CN1	1-750-832-21 o	CONNECTOR, BB 120P, FEMALE
CN2	1-766-194-11 o	CONNECTOR, D-SUB 9P, FEMALE
CN3	1-766-194-11 o	CONNECTOR, D-SUB 9P, FEMALE
CN4	1-778-465-11 s	CONNECTOR 20P, FEMALE
CN5	1-774-776-11 s	CONNECTOR, PC CARD 68P
CNI16	1-540-151-21 s	SOCKET, IC 32P
D1	8-719-158-55 s	DIODE RD15SB-T1
D2	8-719-158-55 s	DIODE RD15SB-T1
D3	8-719-158-55 s	DIODE RD15SB-T1
D4	8-719-158-55 s	DIODE RD15SB-T1
D5	8-719-158-55 s	DIODE RD15SB-T1
D6	8-719-158-55 s	DIODE RD15SB-T1
D7	8-719-158-55 s	DIODE RD15SB-T1
D8	8-719-158-55 s	DIODE RD15SB-T1
D9	8-719-158-55 s	DIODE RD15SB-T1
D10	8-719-158-55 s	DIODE RD15SB-T1
D11	8-719-158-55 s	DIODE RD15SB-T1
D12	8-719-158-55 s	DIODE RD15SB-T1
D13	8-719-158-55 s	DIODE RD15SB-T1
D14	8-719-158-55 s	DIODE RD15SB-T1
D15	8-719-158-55 s	DIODE RD15SB-T1
D16	8-719-158-55 s	DIODE RD15SB-T1
D17	8-719-158-55 s	DIODE RD15SB-T1
D18	8-719-158-55 s	DIODE RD15SB-T1
D19	8-719-158-55 s	DIODE RD15SB-T1
D20	8-719-158-55 s	DIODE RD15SB-T1
D23	8-719-820-50 s	DIODE TLY205
D25	8-719-820-61 s	DIODE 1SS294
D28	8-719-056-17 s	DIODE RD6.2MW-T1B
D29	8-719-056-17 s	DIODE RD6.2MW-T1B
D30	8-719-056-17 s	DIODE RD6.2MW-T1B
D31	8-719-056-17 s	DIODE RD6.2MW-T1B
D32	8-719-056-17 s	DIODE RD6.2MW-T1B
D33	8-719-056-17 s	DIODE RD6.2MW-T1B
D34	8-719-056-17 s	DIODE RD6.2MW-T1B
D35	8-719-158-55 s	DIODE RD15SB-T1

(CPU-202 BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
D36	8-719-158-55 s	DIODE RD15SB-T1
D37	8-719-158-55 s	DIODE RD15SB-T1
D38	8-719-158-55 s	DIODE RD15SB-T1
D39	8-719-158-55 s	DIODE RD15SB-T1
D40	8-719-158-55 s	DIODE RD15SB-T1
D41	8-719-158-55 s	DIODE RD15SB-T1
D42	8-719-158-55 s	DIODE RD15SB-T1
D43	8-719-158-55 s	DIODE RD15SB-T1
D44	8-719-158-55 s	DIODE RD15SB-T1
D45	8-719-158-55 s	DIODE RD15SB-T1
D46	8-719-158-55 s	DIODE RD15SB-T1
D47	8-719-158-55 s	DIODE RD15SB-T1
D48	8-719-158-55 s	DIODE RD15SB-T1
D49	8-719-158-55 s	DIODE RD15SB-T1
D50	8-719-158-55 s	DIODE RD15SB-T1
D51	8-719-158-55 s	DIODE RD15SB-T1
D52	8-719-158-55 s	DIODE RD15SB-T1
D53	8-719-158-55 s	DIODE RD15SB-T1
D54	8-719-158-55 s	DIODE RD15SB-T1
FL1	1-233-326-31 s	FILTER, CHIP EMI
FL2	1-233-326-31 s	FILTER, CHIP EMI
FL3	1-233-326-31 s	FILTER, CHIP EMI
FL4	1-233-326-31 s	FILTER, CHIP EMI
FL5	1-233-326-31 s	FILTER, CHIP EMI
FL6	1-233-326-31 s	FILTER, CHIP EMI
FL7	1-233-326-31 s	FILTER, CHIP EMI
FL8	1-233-326-31 s	FILTER, CHIP EMI
FL9	1-233-326-31 s	FILTER, CHIP EMI
FL10	1-233-326-31 s	FILTER, CHIP EMI
FL11	1-233-326-31 s	FILTER, CHIP EMI
FL12	1-233-326-31 s	FILTER, CHIP EMI
FL13	1-233-326-31 s	FILTER, CHIP EMI
FL14	1-233-326-31 s	FILTER, CHIP EMI
FL15	1-233-326-31 s	FILTER, CHIP EMI
FL16	1-233-326-31 s	FILTER, CHIP EMI
FL17	1-233-319-31 s	FILTER, CHIP EMI
FL18	1-233-319-31 s	FILTER, CHIP EMI
FL19	1-233-319-31 s	FILTER, CHIP EMI
FL20	1-233-319-31 s	FILTER, CHIP EMI
FL21	1-233-319-31 s	FILTER, CHIP EMI
FL22	1-233-319-31 s	FILTER, CHIP EMI
FL23	1-233-319-31 s	FILTER, CHIP EMI
FL24	1-233-319-31 s	FILTER, CHIP EMI
FL25	1-233-319-31 s	FILTER, CHIP EMI
FL26	1-233-319-31 s	FILTER, CHIP EMI
FL27	1-233-319-31 s	FILTER, CHIP EMI
FL28	1-233-319-31 s	FILTER, CHIP EMI
FL29	1-233-319-31 s	FILTER, CHIP EMI
FL30	1-233-319-31 s	FILTER, CHIP EMI
IC2	8-759-365-29 s	IC KU80486SXSA-25
IC3	8-759-195-75 o	IC WD8110LVZZ25
IC4	8-759-365-27 s	IC WD8122LVZX
IC5	8-759-195-76 o	IC WD7625LVSS
IC6	8-759-365-30 s	IC RF5C296
IC7	8-759-988-66 s	IC MB89371APF
IC10	8-759-538-54 s	IC KM416C1200CT-6T
IC11	8-759-538-54 s	IC KM416C1200CT-6T
IC12	8-759-538-54 s	IC KM416C1200CT-6T
IC13	8-759-538-54 s	IC KM416C1200CT-6T

8 (PCS-5100/5100P-J, E)

(CPU-202 BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
IC14	8-759-365-28	s IC E28F016XD-85
IC15	8-759-365-28	s IC E28F016XD-85
IC16	8-759-473-78	o IC AM29F010-120JC-RAP0V3
IC20	8-759-988-27	s IC SN75188NS-E05
IC21	8-759-988-27	s IC SN75188NS-E05
IC22	8-759-988-24	s IC SN75189ANS-E05
IC23	8-759-988-24	s IC SN75189ANS-E05
IC24	8-759-988-24	s IC SN75189ANS-E05
IC30	8-759-452-05	s IC PI74FCT162Q245ATAX
IC31	8-759-452-05	s IC PI74FCT162Q245ATAX
IC32	8-759-452-05	s IC PI74FCT162Q245ATAX
IC33	8-759-452-05	s IC PI74FCT162Q245ATAX
IC34	8-759-452-05	s IC PI74FCT162Q245ATAX
IC41	8-759-557-29	s IC ISPLSI2032-80LT44-RAP10V1
IC42	8-759-973-71	s IC TL7705CPS-B
IC50	8-759-243-47	s IC TC74ACT04F
IC51	8-759-936-25	s IC SN74AS08NS-E20
IC52	8-759-347-38	s IC SN74ALS138ANS-E05
IC53	8-759-491-37	s IC TC74VHCT245AF(EL)
IC54	8-759-927-29	s IC SN74HCU04NS
IC56	8-759-491-36	s IC TC74VHCT244AF(EL)
IC57	8-759-934-54	s IC SN74ALS273NS-E05
IC59	8-759-491-36	s IC TC74VHCT244AF(EL)
IC60	8-759-941-17	s IC SN74LS06NS
IC63	8-759-936-25	s IC SN74AS08NS-E20
IC70	8-759-926-95	s IC SN74HC4020ANS
IC71	8-759-462-00	o IC PALCE16V8H-15SC/4/T-RAP06V1
L1	1-408-771-11	s INDUCTOR, CHIP 3.3uH
PS1	Δ 1-576-212-21	s FUSE, CHIP 1.25A 125V
Q4	8-729-120-53	s TRANSISTOR 2SJ132-Z
R1	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R2	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R3	1-216-803-11	s METAL, CHIP 33 5% 1/16W
R4	1-216-803-11	s METAL, CHIP 33 5% 1/16W
R5	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R10	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R11	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R12	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R15	1-216-857-11	s METAL, CHIP 1M 5% 1/16W
R16	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R17	1-216-803-11	s METAL, CHIP 33 5% 1/16W
R18	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R19	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R20	1-216-803-11	s METAL, CHIP 33 5% 1/16W
R21	1-216-803-11	s METAL, CHIP 33 5% 1/16W
R22	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R23	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R24	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R25	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R26	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R27	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R28	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R29	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R30	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R31	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R32	1-216-841-11	s METAL, CHIP 47K 5% 1/16W

(CPU-202 BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
R33	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R34	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R35	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R36	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R37	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R38	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R39	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R43	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R44	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R45	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R48	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R50	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R51	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R52	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R53	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R54	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R56	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R58	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R59	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R60	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R61	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R63	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R64	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R65	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R66	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R67	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R68	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R69	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R70	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R71	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R72	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R73	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R74	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R75	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R76	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R77	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R78	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R79	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R80	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R81	1-216-803-11	s METAL, CHIP 33 5% 1/16W
R82	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R83	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R84	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R85	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R86	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R87	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R88	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R89	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R90	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R91	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R92	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R93	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R94	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R95	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R96	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R97	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R98	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R99	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R100	1-216-809-11	s METAL, CHIP 100 5% 1/16W

(CPU-202 BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
R101	1-216-809-11	s METAL, CHIP 100 5% 1/16W
RB1	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB2	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB3	1-239-390-11	s RESISTOR BLOCK, CHIP 33x4
RB4	1-239-390-11	s RESISTOR BLOCK, CHIP 33x4
RB5	1-239-390-11	s RESISTOR BLOCK, CHIP 33x4
RB6	1-239-390-11	s RESISTOR BLOCK, CHIP 33x4
RB7	1-239-390-11	s RESISTOR BLOCK, CHIP 33x4
RB8	1-239-390-11	s RESISTOR BLOCK, CHIP 33x4
RB9	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB10	1-239-389-11	s RESISTOR BLOCK, CHIP 47Kx4
RB11	1-239-306-11	s RESISTOR BLOCK, CHIP 10Kx8
RB13	1-239-390-11	s RESISTOR BLOCK, CHIP 33x4
RB14	1-239-430-11	s RESISTOR BLOCK, CHIP 4.7Kx4
RB15	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB16	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB17	1-239-407-11	s RESISTOR BLOCK, CHIP 330x4
RB19	1-239-390-11	s RESISTOR BLOCK, CHIP 33x4
RB20	1-239-306-11	s RESISTOR BLOCK, CHIP 10Kx8
RB21	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB22	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB23	1-239-306-11	s RESISTOR BLOCK, CHIP 10Kx8
RB24	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB25	1-239-306-11	s RESISTOR BLOCK, CHIP 10Kx8
S1	1-692-270-41	s SWITCH, SLIDE
X1	1-760-969-21	s CRYSTAL 25.000MHz
X2	1-760-464-11	s CRYSTAL 4.9152MHz
X3	1-579-994-12	s CERAMIC 14.31818MHz
X4	1-760-965-21	s CRYSTAL 48.000MHz

DAD-33 BOARD(PCS-G510)

Ref. No. or Q'ty	Part No.	SP Description
1pc	3-179-084-01	s LEVER (R), PC BOARD
1pc	7-682-649-09	s SCREW +PS 3X10
1pc	7-682-947-01	s SCREW +PSW 3X6
1pc	7-685-871-01	s SCREW +BVTT 3X6 (S)
C3	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C4	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C5	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C101	1-115-155-11	s ELECT 22uF 20% 16V
C102	1-115-155-11	s ELECT 22uF 20% 16V
C103	1-115-155-11	s ELECT 22uF 20% 16V
C104	1-162-915-11	s CERAMIC, CHIP 10PF 50V
C105	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C106	1-162-907-11	s CERAMIC, CHIP 2PF 50V
C107	1-162-907-11	s CERAMIC, CHIP 2PF 50V
C108	1-162-907-11	s CERAMIC, CHIP 2PF 50V
C109	1-162-907-11	s CERAMIC, CHIP 2PF 50V
C110	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C111	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C112	1-162-907-11	s CERAMIC, CHIP 2PF 50V
C113	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C114	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C115	1-162-922-11	s CERAMIC, CHIP 39PF 5% 50V
C116	1-162-922-11	s CERAMIC, CHIP 39PF 5% 50V
C121	1-126-400-11	s ELECT, CHIP 22uF 20% 35V
C122	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C123	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C124	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C125	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C126	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C127	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C128	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C129	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C130	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C131	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C132	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C201	1-126-402-11	s ELECT, CHIP 2.2uF 20% 50V
C202	1-115-340-11	s CERAMIC 0.22uF 10% 25V
C203	1-115-340-11	s CERAMIC 0.22uF 10% 25V
C204	1-126-401-11	s ELECT, CHIP 1uF 20% 50V
C205	1-107-826-91	s CERAMIC 0.1uF 10% 16V
C206	1-115-340-11	s CERAMIC 0.22uF 10% 25V
C207	1-126-401-11	s ELECT, CHIP 1uF 20% 50V
C208	1-162-970-11	s CERAMIC, CHIP 0.01uF 10% 25V
C209	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C210	1-162-966-11	s CERAMIC, CHIP 0.0022uF 10% 50V
C211	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C212	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C213	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C214	1-115-340-11	s CERAMIC 0.22uF 10% 25V
C215	1-164-227-11	s CERAMIC, CHIP 0.022uF 10% 25V
C216	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C217	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C218	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C219	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C221	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C223	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C224	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C225	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C226	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V

10 (PCS-5100/5100P-J, E)

(DAD-33 BOARD(PCS-G510))

Ref. No. or Q'ty	Part No.	SP Description
C227	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C229	1-162-959-11	s CERAMIC, CHIP 330PF 5% 50V
C230	1-115-340-11	s CERAMIC 0.22uF 10% 25V
C231	1-107-826-91	s CERAMIC 0.1uF 10% 16V
C232	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C233	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C251	1-126-400-11	s ELECT, CHIP 22uF 20% 35V
C252	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C253	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C254	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C255	1-126-400-11	s ELECT, CHIP 22uF 20% 35V
C256	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C261	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C262	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C302	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C303	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C305	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C306	1-162-915-11	s CERAMIC, CHIP 10PF 50V
C307	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C308	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C309	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C310	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C311	1-162-915-11	s CERAMIC, CHIP 10PF 50V
C312	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C313	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C314	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C315	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C316	1-162-915-11	s CERAMIC, CHIP 10PF 50V
C317	1-126-400-11	s ELECT, CHIP 22uF 20% 35V
C318	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C319	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C320	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C321	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C322	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C323	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C324	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C325	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C326	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C327	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C328	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C329	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C330	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C331	1-162-966-11	s CERAMIC, CHIP 0.0022uF 10% 50V
C332	1-162-915-11	s CERAMIC, CHIP 10PF 50V
C333	1-162-966-11	s CERAMIC, CHIP 0.0022uF 10% 50V
C334	1-162-915-11	s CERAMIC, CHIP 10PF 50V
C335	1-162-966-11	s CERAMIC, CHIP 0.0022uF 10% 50V
C337	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C338	1-162-970-11	s CERAMIC, CHIP 0.01uF 10% 25V
C339	1-162-970-11	s CERAMIC, CHIP 0.01uF 10% 25V
C340	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C341	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C342	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C343	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C344	1-162-970-11	s CERAMIC, CHIP 0.01uF 10% 25V
C345	1-162-970-11	s CERAMIC, CHIP 0.01uF 10% 25V
C346	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C347	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C348	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V

(DAD-33 BOARD(PCS-G510))

Ref. No. or Q'ty	Part No.	SP Description
C349	1-162-970-11	s CERAMIC, CHIP 0.01uF 10% 25V
C350	1-162-970-11	s CERAMIC, CHIP 0.01uF 10% 25V
C351	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C352	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C353	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C381	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C382	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C383	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C384	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C385	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C386	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C387	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C388	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C401	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C402	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C403	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C404	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C405	1-162-921-11	s CERAMIC, CHIP 33PF 5% 50V
C406	1-162-964-11	s CERAMIC, CHIP 0.001uF 10% 50V
C407	1-162-964-11	s CERAMIC, CHIP 0.001uF 10% 50V
C408	1-162-917-11	s CERAMIC, CHIP 15PF 5% 50V
C409	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C410	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C411	1-162-917-11	s CERAMIC, CHIP 15PF 5% 50V
C412	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C413	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C414	1-162-917-11	s CERAMIC, CHIP 15PF 5% 50V
C415	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C416	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C417	1-126-400-11	s ELECT, CHIP 22uF 20% 35V
C418	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C419	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C420	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C421	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C422	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C423	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C424	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C425	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C426	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C427	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C428	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C429	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C430	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C431	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C432	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C433	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C500	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C501	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C502	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C503	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C504	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C505	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C506	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C507	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C508	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C509	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C510	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C511	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C512	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V

(DAD-33 BOARD(PCS-G510))

Ref. No. or Q'ty	Part No.	SP Description
C513	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C514	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C515	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C516	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C517	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C518	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C519	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C520	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C521	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C522	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C523	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C524	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C525	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C526	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C527	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C528	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C529	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C530	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C531	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C532	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C533	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C534	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C535	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C536	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C537	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C613	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C614	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C615	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C616	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C619	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
CN2	1-580-195-21	s CONNECTOR, PHEC 100P, FEMALE
CN3	1-764-642-11	o CONNECTOR, D-SUB 15P, FEMALE
CN4	1-566-848-11	s CONNECTOR, CIRCULAR 4P(S), FEMALE
CN5	1-764-642-11	o CONNECTOR, D-SUB 15P, FEMALE
CN6	1-691-591-11	o CONNECTOR 8P, MALE
D1	8-719-041-79	s DIODE MA721WA-TX
E1	1-535-757-11	s CHIP, CHECKER
E2	1-535-757-11	s CHIP, CHECKER
E3	1-535-757-11	s CHIP, CHECKER
E11	1-535-757-11	s CHIP, CHECKER
E12	1-535-757-11	s CHIP, CHECKER
E13	1-535-757-11	s CHIP, CHECKER
FL2	1-239-755-11	s FILTER, LOW-PASS
FL3	1-239-290-11	s FILTER, LOW-PASS
FL4	1-239-290-11	s FILTER, LOW-PASS
FL5	1-233-424-11	s FILTER, LOW-PASS
FL6	1-239-636-11	s FILTER, LOW-PASS
FL7	1-239-636-11	s FILTER, LOW-PASS
FL11	1-239-290-11	s FILTER, LOW-PASS
FL12	1-239-290-11	s FILTER, LOW-PASS
FL101	1-233-316-31	s FILTER, CHIP EMI
FL102	1-233-316-31	s FILTER, CHIP EMI
FL103	1-233-316-31	s FILTER, CHIP EMI
FL104	1-239-825-31	s FILTER, CHIP EMI
FL105	1-239-825-31	s FILTER, CHIP EMI
FL106	1-239-825-31	s FILTER, CHIP EMI
FL107	1-239-825-31	s FILTER, CHIP EMI

(DAD-33 BOARD(PCS-G510))

Ref. No. or Q'ty	Part No.	SP Description
FL108	1-233-316-31	s FILTER, CHIP EMI
FL109	1-233-316-31	s FILTER, CHIP EMI
FL110	1-233-316-31	s FILTER, CHIP EMI
FL111	1-239-825-31	s FILTER, CHIP EMI
FL112	1-239-825-31	s FILTER, CHIP EMI
IC10	8-759-561-64	s IC ISPLSI1016E-80LT44-RAP00V1
IC11	8-752-073-52	s IC CXA2016S
IC12	8-759-269-09	s IC SN74HCT04ANS-E05
IC13	8-759-295-09	s IC TLC2932IPW
IC14	8-759-239-55	s IC TC74HC123AF
IC15	8-759-926-18	s IC SN74HC157ANS
IC16	8-759-081-44	s IC TC74VHC04F(EL)
IC17	8-759-186-39	s IC TC74VHC74F(EL)
IC18	8-759-186-53	s IC TC74VHC163F(EL)
IC19	8-759-186-53	s IC TC74VHC163F(EL)
IC20	8-759-186-53	s IC TC74VHC163F(EL)
IC21	8-759-271-04	s IC LT1252CS8
IC22	8-752-371-18	s IC CXD2302Q
IC23	8-752-371-18	s IC CXD2302Q
IC24	8-752-371-18	s IC CXD2302Q
IC25	8-759-931-56	s IC SN74LS684NS-E05
IC26	8-759-268-95	s IC SN74HCT00ANS-E05
IC27	8-759-239-25	s IC TC74HC4066AF
IC31	8-752-380-71	s IC CXD1913Q
IC32	8-752-870-04	s IC CXP5068H-242Q
IC36	8-759-239-58	s IC TC74HC221AF
IC37	8-759-524-25	o IC TC7WH241FU(TE12R)
IC41	8-759-701-59	s IC NJM78M09FA
IC42	8-759-069-28	s IC PQ05RF11
IC43	8-759-701-87	s IC NJM7909FA
IC101	8-759-175-29	s IC TC74VHC374F(EL)
IC102	8-759-540-68	s IC UPD65646GB-Y16-9EU
IC103	8-759-926-52	s IC SN74HC257NS
IC104	8-759-175-29	s IC TC74VHC374F(EL)
IC105	8-759-175-29	s IC TC74VHC374F(EL)
IC106	8-759-175-29	s IC TC74VHC374F(EL)
IC107	8-759-174-16	s IC TC74VHC244F(EL)
IC108	8-759-186-51	s IC TC74VHC157F(EL)
IC109	8-759-186-39	s IC TC74VHC74F(EL)
IC110	8-759-186-39	s IC TC74VHC74F(EL)
IC111	8-759-186-39	s IC TC74VHC74F(EL)
IC112	8-759-186-26	s IC TC74VHC02F(EL)
IC113	8-759-179-94	s IC HM530281RTT-20
IC114	8-759-179-94	s IC HM530281RTT-20
IC115	8-759-179-94	s IC HM530281RTT-20
IC116	8-759-179-94	s IC HM530281RTT-20
IC117	8-759-540-68	s IC UPD65646GB-Y16-9EU
IC118	8-759-540-68	s IC UPD65646GB-Y16-9EU
IC119	8-759-561-63	s IC ISPLSI1032E-70LT-RAP03V1
IC120	8-759-269-09	s IC SN74HCT04ANS-E05
IC121	8-759-175-29	s IC TC74VHC374F(EL)
IC122	8-759-926-69	s IC SN74HC377ANS
IC123	8-759-186-51	s IC TC74VHC157F(EL)
IC124	8-759-186-51	s IC TC74VHC157F(EL)
IC125	8-759-186-51	s IC TC74VHC157F(EL)
IC126	8-759-540-69	s IC UPD65621GB-Y12-9EU
IC127	8-759-540-69	s IC UPD65621GB-Y12-9EU
IC128	8-759-186-51	s IC TC74VHC157F(EL)
IC129	8-759-174-16	s IC TC74VHC244F(EL)

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Ref. No. or Q'ty	Part No.	SP Description
IC130	8-759-186-39	s IC TC74VHC74F(EL)
IC131	8-759-037-79	s IC SN74HC163ANS-E05
IC132	8-759-186-39	s IC TC74VHC74F(EL)
IC133	8-759-186-26	s IC TC74VHC02F(EL)
IC134	8-759-174-16	s IC TC74VHC244F(EL)
IC135	8-759-524-25	o IC TC7WH241FU(TE12R)
IC136	8-759-447-77	s IC TC7WH74FU(TE12R)
IC137	8-759-524-25	o IC TC7WH241FU(TE12R)
JC101	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC103	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC105	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC108	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC109	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC501	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC502	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC506	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC508	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC509	1-216-864-11	s METAL, CHIP 0 5% 1/16W
L4	1-408-777-00	s INDUCTOR, CHIP 10uH
L5	1-408-785-21	s INDUCTOR, CHIP 47uH
L6	1-408-785-21	s INDUCTOR, CHIP 47uH
L7	1-408-785-21	s INDUCTOR, CHIP 47uH
L8	1-408-777-00	s INDUCTOR, CHIP 10uH
L9	1-408-777-00	s INDUCTOR, CHIP 10uH
L10	1-408-777-00	s INDUCTOR, CHIP 10uH
L11	1-408-777-00	s INDUCTOR, CHIP 10uH
L12	1-408-777-00	s INDUCTOR, CHIP 10uH
L13	1-408-777-00	s INDUCTOR, CHIP 10uH
L14	1-408-785-21	s INDUCTOR, CHIP 47uH
Q11	8-729-117-32	s TRANSISTOR 2SC4177
Q12	8-729-117-32	s TRANSISTOR 2SC4177
Q13	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q14	8-729-117-32	s TRANSISTOR 2SC4177
Q15	8-729-117-32	s TRANSISTOR 2SC4177
Q16	8-729-117-32	s TRANSISTOR 2SC4177
Q17	8-729-117-32	s TRANSISTOR 2SC4177
Q19	8-729-117-32	s TRANSISTOR 2SC4177
Q20	8-729-117-32	s TRANSISTOR 2SC4177
Q21	8-729-117-32	s TRANSISTOR 2SC4177
Q22	8-729-117-32	s TRANSISTOR 2SC4177
Q23	8-729-117-32	s TRANSISTOR 2SC4177
Q24	8-729-117-32	s TRANSISTOR 2SC4177
Q25	8-729-117-32	s TRANSISTOR 2SC4177
Q26	8-729-117-32	s TRANSISTOR 2SC4177
Q27	8-729-117-32	s TRANSISTOR 2SC4177
Q28	8-729-117-32	s TRANSISTOR 2SC4177
Q29	8-729-117-32	s TRANSISTOR 2SC4177
Q30	8-729-117-32	s TRANSISTOR 2SC4177
Q31	8-729-117-32	s TRANSISTOR 2SC4177
Q32	8-729-117-32	s TRANSISTOR 2SC4177
Q33	8-729-117-32	s TRANSISTOR 2SC4177
Q34	8-729-117-32	s TRANSISTOR 2SC4177
Q35	8-729-117-32	s TRANSISTOR 2SC4177
Q36	8-729-117-32	s TRANSISTOR 2SC4177
Q37	8-729-117-32	s TRANSISTOR 2SC4177
Q38	8-729-117-32	s TRANSISTOR 2SC4177
Q39	8-729-117-32	s TRANSISTOR 2SC4177
Q41	8-729-117-32	s TRANSISTOR 2SC4177

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Ref. No. or Q'ty	Part No.	SP Description
Q42	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q44	8-729-117-32	s TRANSISTOR 2SC4177
Q45	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q46	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q47	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q48	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q49	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q53	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q54	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q55	8-729-117-32	s TRANSISTOR 2SC4177
Q56	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q57	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q58	8-729-117-32	s TRANSISTOR 2SC4177
Q59	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q60	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q61	8-729-117-32	s TRANSISTOR 2SC4177
Q64	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q65	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q66	8-729-117-32	s TRANSISTOR 2SC4177
Q67	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q68	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q69	8-729-117-32	s TRANSISTOR 2SC4177
Q70	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q71	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q72	8-729-117-32	s TRANSISTOR 2SC4177
Q73	8-729-117-32	s TRANSISTOR 2SC4177
Q74	8-729-117-32	s TRANSISTOR 2SC4177
Q75	8-729-117-32	s TRANSISTOR 2SC4177
Q78	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q79	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q80	8-729-117-32	s TRANSISTOR 2SC4177
Q81	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q82	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q83	8-729-117-32	s TRANSISTOR 2SC4177
Q84	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q85	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q86	8-729-117-32	s TRANSISTOR 2SC4177
Q87	8-729-117-32	s TRANSISTOR 2SC4177
Q88	8-729-117-32	s TRANSISTOR 2SC4177
Q89	8-729-117-32	s TRANSISTOR 2SC4177
Q90	8-729-117-32	s TRANSISTOR 2SC4177
Q91	8-729-117-32	s TRANSISTOR 2SC4177
Q92	8-729-117-32	s TRANSISTOR 2SC4177
Q101	8-729-117-32	s TRANSISTOR 2SC4177
Q102	8-729-117-32	s TRANSISTOR 2SC4177
Q103	8-729-117-32	s TRANSISTOR 2SC4177
Q104	8-729-117-32	s TRANSISTOR 2SC4177
Q105	8-729-117-32	s TRANSISTOR 2SC4177
Q106	8-729-117-32	s TRANSISTOR 2SC4177
Q107	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q108	8-729-117-32	s TRANSISTOR 2SC4177
Q109	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q110	8-729-117-32	s TRANSISTOR 2SC4177
Q111	8-729-117-32	s TRANSISTOR 2SC4177
Q112	8-729-117-32	s TRANSISTOR 2SC4177
Q113	8-729-117-32	s TRANSISTOR 2SC4177
Q114	8-729-117-32	s TRANSISTOR 2SC4177
Q115	8-729-117-32	s TRANSISTOR 2SC4177
Q116	8-729-140-63	s TRANSISTOR 2SA1611-M5M6

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Ref. No. or Q'ty	Part No.	SP	Description
Q117	8-729-117-32	s	TRANSISTOR 2SC4177
Q118	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q119	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q120	8-729-117-32	s	TRANSISTOR 2SC4177
Q121	8-729-117-32	s	TRANSISTOR 2SC4177
Q122	8-729-117-32	s	TRANSISTOR 2SC4177
Q123	8-729-117-32	s	TRANSISTOR 2SC4177
Q124	8-729-117-32	s	TRANSISTOR 2SC4177
Q125	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q126	8-729-117-32	s	TRANSISTOR 2SC4177
Q127	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q128	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q129	8-729-117-32	s	TRANSISTOR 2SC4177
Q130	8-729-117-32	s	TRANSISTOR 2SC4177
Q131	8-729-117-32	s	TRANSISTOR 2SC4177
Q132	8-729-117-32	s	TRANSISTOR 2SC4177
Q133	8-729-117-32	s	TRANSISTOR 2SC4177
Q134	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q135	8-729-117-32	s	TRANSISTOR 2SC4177
Q136	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q137	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q138	8-729-117-32	s	TRANSISTOR 2SC4177
Q139	8-729-117-32	s	TRANSISTOR 2SC4177
Q140	8-729-117-32	s	TRANSISTOR 2SC4177
Q141	8-729-117-32	s	TRANSISTOR 2SC4177
Q142	8-729-117-32	s	TRANSISTOR 2SC4177
Q143	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q144	8-729-117-32	s	TRANSISTOR 2SC4177
Q145	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
R31	1-216-837-11	s	METAL, CHIP 22K 5% 1/16W
R32	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R41	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R45	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R54	1-216-845-11	s	METAL, CHIP 100K 5% 1/16W
R55	1-216-845-11	s	METAL, CHIP 100K 5% 1/16W
R100	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R101	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R102	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R103	1-211-990-11	s	METAL, CHIP 75 0.5% 1/16W
R104	1-216-839-11	s	METAL, CHIP 33K 5% 1/16W
R105	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R106	1-216-827-11	s	METAL, CHIP 3.3K 5% 1/16W
R107	1-211-990-11	s	METAL, CHIP 75 0.5% 1/16W
R108	1-216-839-11	s	METAL, CHIP 33K 5% 1/16W
R109	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R110	1-216-827-11	s	METAL, CHIP 3.3K 5% 1/16W
R111	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R112	1-211-990-11	s	METAL, CHIP 75 0.5% 1/16W
R113	1-216-839-11	s	METAL, CHIP 33K 5% 1/16W
R114	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R115	1-216-827-11	s	METAL, CHIP 3.3K 5% 1/16W
R116	1-218-839-11	s	METAL, CHIP 470 0.5% 1/16W
R117	1-211-979-11	s	METAL, CHIP 27 0.5% 1/16W
R118	1-218-832-11	s	METAL, CHIP 240 0.5% 1/16W
R119	1-211-973-11	s	METAL, CHIP 15 0.5% 1/16W
R120	1-218-848-11	s	METAL, CHIP 1.1K 0.5% 1/16W
R121	1-218-833-11	s	METAL, CHIP 270 0.5% 1/16W
R122	1-216-817-11	s	METAL, CHIP 470 5% 1/16W
R123	1-216-809-11	s	METAL, CHIP 100 5% 1/16W

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Ref. No. or Q'ty	Part No.	SP	Description
R124	1-216-817-11	s	METAL, CHIP 470 5% 1/16W
R125	1-216-815-11	s	METAL, CHIP 330 5% 1/16W
R126	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R127	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R128	1-216-817-11	s	METAL, CHIP 470 5% 1/16W
R129	1-218-839-11	s	METAL, CHIP 470 0.5% 1/16W
R130	1-218-847-11	s	METAL, CHIP 1K 0.5% 1/16W
R131	1-218-829-11	s	METAL, CHIP 180 0.5% 1/16W
R132	1-216-827-11	s	METAL, CHIP 3.3K 5% 1/16W
R133	1-218-847-11	s	METAL, CHIP 1K 0.5% 1/16W
R134	1-218-877-11	s	METAL, CHIP 18K 0.5% 1/16W
R135	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R136	1-216-797-11	s	METAL, CHIP 10 5% 1/16W
R137	1-216-817-11	s	METAL, CHIP 470 5% 1/16W
R138	1-216-821-11	s	METAL, CHIP 1K 5% 1/16W
R139	1-216-817-11	s	METAL, CHIP 470 5% 1/16W
R140	1-216-817-11	s	METAL, CHIP 470 5% 1/16W
R141	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R142	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R143	1-216-817-11	s	METAL, CHIP 470 5% 1/16W
R144	1-218-832-11	s	METAL, CHIP 240 0.5% 1/16W
R145	1-211-973-11	s	METAL, CHIP 15 0.5% 1/16W
R146	1-218-839-11	s	METAL, CHIP 470 0.5% 1/16W
R147	1-211-979-11	s	METAL, CHIP 27 0.5% 1/16W
R148	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R149	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R151	1-216-827-11	s	METAL, CHIP 3.3K 5% 1/16W
R152	1-218-847-11	s	METAL, CHIP 1K 0.5% 1/16W
R153	1-216-821-11	s	METAL, CHIP 1K 5% 1/16W
R154	1-218-847-11	s	METAL, CHIP 1K 0.5% 1/16W
R155	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R156	1-216-797-11	s	METAL, CHIP 10 5% 1/16W
R157	1-216-817-11	s	METAL, CHIP 470 5% 1/16W
R158	1-216-821-11	s	METAL, CHIP 1K 5% 1/16W
R159	1-216-817-11	s	METAL, CHIP 470 5% 1/16W
R160	1-216-817-11	s	METAL, CHIP 470 5% 1/16W
R161	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R162	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R163	1-216-817-11	s	METAL, CHIP 470 5% 1/16W
R164	1-218-848-11	s	METAL, CHIP 1.1K 0.5% 1/16W
R165	1-218-833-11	s	METAL, CHIP 270 0.5% 1/16W
R166	1-218-832-11	s	METAL, CHIP 240 0.5% 1/16W
R167	1-211-973-11	s	METAL, CHIP 15 0.5% 1/16W
R168	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R169	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R171	1-216-827-11	s	METAL, CHIP 3.3K 5% 1/16W
R172	1-218-847-11	s	METAL, CHIP 1K 0.5% 1/16W
R173	1-216-821-11	s	METAL, CHIP 1K 5% 1/16W
R174	1-218-847-11	s	METAL, CHIP 1K 0.5% 1/16W
R175	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R176	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R178	1-216-827-11	s	METAL, CHIP 3.3K 5% 1/16W
R179	1-218-839-11	s	METAL, CHIP 470 0.5% 1/16W
R180	1-218-847-11	s	METAL, CHIP 1K 0.5% 1/16W
R181	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R182	1-218-847-11	s	METAL, CHIP 1K 0.5% 1/16W
R183	1-218-849-11	s	METAL, CHIP 1.2K 0.5% 1/16W
R184	1-211-969-11	s	METAL, CHIP 10 0.5% 1/16W
R185	1-216-827-11	s	METAL, CHIP 3.3K 5% 1/16W

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Ref. No. or Q'ty	Part No.	SP Description
R186	1-218-841-11	s METAL, CHIP 560 0.5% 1/16W
R187	1-218-865-11	s METAL, CHIP 5.6K 0.5% 1/16W
R188	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R189	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R190	1-218-849-11	s METAL, CHIP 1.2K 0.5% 1/16W
R191	1-211-969-11	s METAL, CHIP 10 0.5% 1/16W
R192	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R193	1-218-841-11	s METAL, CHIP 560 0.5% 1/16W
R194	1-218-865-11	s METAL, CHIP 5.6K 0.5% 1/16W
R195	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R201	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R203	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R204	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R205	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R206	1-216-839-11	s METAL, CHIP 33K 5% 1/16W
R207	1-216-814-11	s METAL, CHIP 270 5% 1/16W
R208	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R209	1-218-873-11	s METAL, CHIP 12K 0.5% 1/16W
R210	1-218-873-11	s METAL, CHIP 12K 0.5% 1/16W
R211	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R212	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R215	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R216	1-216-836-11	s METAL, CHIP 18K 5% 1/16W
R217	1-216-826-11	s METAL, CHIP 2.7K 5% 1/16W
R218	1-218-858-11	s METAL, CHIP 3K 0.5% 1/16W
R219	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R220	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R222	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R224	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R225	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R226	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R227	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R228	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R229	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R232	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R233	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R234	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R235	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R236	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R238	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R239	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R240	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R241	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R242	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R243	1-216-849-11	s METAL, CHIP 220K 5% 1/16W
R244	1-216-839-11	s METAL, CHIP 33K 5% 1/16W
R245	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R251	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R252	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R261	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R262	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R263	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R264	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R266	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R267	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R268	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R269	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R271	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R272	1-216-845-11	s METAL, CHIP 100K 5% 1/16W

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Ref. No. or Q'ty	Part No.	SP Description
R273	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R274	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R281	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R282	1-216-823-11	s METAL, CHIP 1.5K 5% 1/16W
R283	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R284	1-216-823-11	s METAL, CHIP 1.5K 5% 1/16W
R285	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R286	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R287	1-216-823-11	s METAL, CHIP 1.5K 5% 1/16W
R291	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R292	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R293	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R308	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R309	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R310	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R311	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R312	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R313	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R314	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R315	1-216-815-11	s METAL, CHIP 330 5% 1/16W
R316	1-216-824-11	s METAL, CHIP 1.8K 5% 1/16W
R318	1-216-807-11	s METAL, CHIP 68 5% 1/16W
R325	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R326	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R327	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R328	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R329	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R330	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R331	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R332	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R333	1-216-814-11	s METAL, CHIP 270 5% 1/16W
R334	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R335	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R336	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R337	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R338	1-216-807-11	s METAL, CHIP 68 5% 1/16W
R345	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R346	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R347	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R348	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R349	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R350	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R351	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R352	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R353	1-216-814-11	s METAL, CHIP 270 5% 1/16W
R354	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R355	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R356	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R357	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R358	1-216-807-11	s METAL, CHIP 68 5% 1/16W
R359	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R360	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R361	1-216-831-11	s METAL, CHIP 6.8K 5% 1/16W
R362	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R363	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R364	1-216-831-11	s METAL, CHIP 6.8K 5% 1/16W
R365	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R366	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R367	1-216-831-11	s METAL, CHIP 6.8K 5% 1/16W

(DAD-33 BOARD(PCS-G510))

Ref. No. or Q'ty	Part No.	SP Description
R368	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R369	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R370	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R371	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R372	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R373	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R374	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R375	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R376	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R377	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R378	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R379	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R381	1-218-859-11	s METAL, CHIP 3.3K 0.5% 1/16W
R382	1-218-859-11	s METAL, CHIP 3.3K 0.5% 1/16W
R383	1-218-855-11	s METAL, CHIP 2.2K 0.5% 1/16W
R384	1-218-830-11	s METAL, CHIP 200 0.5% 1/16W
R385	1-218-830-11	s METAL, CHIP 200 0.5% 1/16W
R386	1-218-830-11	s METAL, CHIP 200 0.5% 1/16W
R387	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R401	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R402	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R403	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R404	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R405	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R406	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R407	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R408	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R409	1-216-815-11	s METAL, CHIP 330 5% 1/16W
R410	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R411	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R412	1-216-823-11	s METAL, CHIP 1.5K 5% 1/16W
R413	1-216-813-11	s METAL, CHIP 220 5% 1/16W
R414	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R415	1-216-830-11	s METAL, CHIP 5.6K 5% 1/16W
R416	1-216-839-11	s METAL, CHIP 33K 5% 1/16W
R417	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R418	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R419	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R420	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R421	1-211-989-11	s METAL, CHIP 68 0.5% 1/16W
R422	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R423	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R424	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R425	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R426	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R427	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R428	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R429	1-216-815-11	s METAL, CHIP 330 5% 1/16W
R430	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R431	1-216-823-11	s METAL, CHIP 1.5K 5% 1/16W
R432	1-216-830-11	s METAL, CHIP 5.6K 5% 1/16W
R433	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R434	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R435	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R436	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R437	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R438	1-211-989-11	s METAL, CHIP 68 0.5% 1/16W
R439	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R440	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W

(DAD-33 BOARD(PCS-G510))

Ref. No. or Q'ty	Part No.	SP Description
R441	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R442	1-218-835-11	s METAL, CHIP 330 0.5% 1/16W
R443	1-218-835-11	s METAL, CHIP 330 0.5% 1/16W
R444	1-218-850-11	s METAL, CHIP 1.3K 0.5% 1/16W
R445	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R446	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R447	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R448	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R449	1-216-839-11	s METAL, CHIP 33K 5% 1/16W
R450	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R451	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R452	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R453	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R454	1-211-989-11	s METAL, CHIP 68 0.5% 1/16W
R455	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R456	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R457	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R458	1-218-835-11	s METAL, CHIP 330 0.5% 1/16W
R459	1-218-835-11	s METAL, CHIP 330 0.5% 1/16W
R460	1-218-850-11	s METAL, CHIP 1.3K 0.5% 1/16W
R461	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R462	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R463	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R464	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R465	1-216-839-11	s METAL, CHIP 33K 5% 1/16W
R466	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R467	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R468	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R469	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R470	1-211-989-11	s METAL, CHIP 68 0.5% 1/16W
R471	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R472	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R473	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R474	1-218-835-11	s METAL, CHIP 330 0.5% 1/16W
R475	1-218-835-11	s METAL, CHIP 330 0.5% 1/16W
R476	1-218-850-11	s METAL, CHIP 1.3K 0.5% 1/16W
R477	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R478	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R479	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R480	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R481	1-216-839-11	s METAL, CHIP 33K 5% 1/16W
R482	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R483	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R484	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R485	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R486	1-211-989-11	s METAL, CHIP 68 0.5% 1/16W
R487	1-218-825-11	s METAL, CHIP 120 0.5% 1/16W
R488	1-218-825-11	s METAL, CHIP 120 0.5% 1/16W
R489	1-218-825-11	s METAL, CHIP 120 0.5% 1/16W
R494	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R495	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R501	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R502	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R503	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R504	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R505	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R506	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R507	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R508	1-216-845-11	s METAL, CHIP 100K 5% 1/16W

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(DAD-33 BOARD(PCS-G510))

Ref. No. or Q'ty	Part No.	SP Description
R509	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R510	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R511	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R512	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R513	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R514	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R515	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R516	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R517	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R518	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R519	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R520	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R521	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R522	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R523	1-216-807-11	s METAL, CHIP 68 5% 1/16W
R524	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R525	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R526	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R527	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R528	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R529	1-216-797-11	s METAL, CHIP 10 5% 1/16W
RB501	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB502	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB503	1-239-409-11	s RESISTOR BLOCK, CHIP 47x4
RB504	1-239-409-11	s RESISTOR BLOCK, CHIP 47x4
RB505	1-239-409-11	s RESISTOR BLOCK, CHIP 47x4
RB506	1-239-409-11	s RESISTOR BLOCK, CHIP 47x4
RB507	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB508	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB509	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB510	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB511	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB512	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB513	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB514	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB515	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB516	1-239-412-11	s RESISTOR BLOCK, CHIP 100x4
RB517	1-239-412-11	s RESISTOR BLOCK, CHIP 100x4
RB518	1-239-412-11	s RESISTOR BLOCK, CHIP 100x4
RB519	1-239-412-11	s RESISTOR BLOCK, CHIP 100x4
RV1	1-238-852-11	s RES, ADJ, METAL 470
RV2	1-238-852-11	s RES, ADJ, METAL 470
RV3	1-238-852-11	s RES, ADJ, METAL 470
RV7	1-238-853-11	s RES, ADJ, METAL 1K
RV8	1-238-853-11	s RES, ADJ, METAL 1K
TH1	1-810-106-11	s THERMISTOR, POSITIVE LINEAR
TH2	1-810-106-11	s THERMISTOR, POSITIVE LINEAR
TH3	1-810-106-11	s THERMISTOR, POSITIVE LINEAR
TP6	1-535-757-11	s CHIP, CHECKER
TP7	1-535-757-11	s CHIP, CHECKER
TP8	1-535-757-11	s CHIP, CHECKER
TP9	1-535-757-11	s CHIP, CHECKER
TP10	1-535-757-11	s CHIP, CHECKER
TP11	1-535-757-11	s CHIP, CHECKER
TP12	1-535-757-11	s CHIP, CHECKER
TP13	1-535-757-11	s CHIP, CHECKER
TP14	1-535-757-11	s CHIP, CHECKER
TP15	1-535-757-11	s CHIP, CHECKER

(DAD-33 BOARD(PCS-G510))

Ref. No. or Q'ty	Part No.	SP Description
TP16	1-535-757-11	s CHIP, CHECKER
TP17	1-535-757-11	s CHIP, CHECKER
TP18	1-535-757-11	s CHIP, CHECKER
TP19	1-535-757-11	s CHIP, CHECKER
TP20	1-535-757-11	s CHIP, CHECKER
TP21	1-535-757-11	s CHIP, CHECKER
TP22	1-535-757-11	s CHIP, CHECKER
TP23	1-535-757-11	s CHIP, CHECKER
TP24	1-535-757-11	s CHIP, CHECKER
TP25	1-535-757-11	s CHIP, CHECKER
TP26	1-535-757-11	s CHIP, CHECKER
TP27	1-535-757-11	s CHIP, CHECKER
TP28	1-535-757-11	s CHIP, CHECKER
TP29	1-535-757-11	s CHIP, CHECKER
TP30	1-535-757-11	s CHIP, CHECKER
TP31	1-535-757-11	s CHIP, CHECKER
TP32	1-535-757-11	s CHIP, CHECKER
TP33	1-535-757-11	s CHIP, CHECKER
TP34	1-535-757-11	s CHIP, CHECKER
TP35	1-535-757-11	s CHIP, CHECKER
TP36	1-535-757-11	s CHIP, CHECKER
TP37	1-535-757-11	s CHIP, CHECKER
TP38	1-535-757-11	s CHIP, CHECKER
TP39	1-535-757-11	s CHIP, CHECKER
TP40	1-535-757-11	s CHIP, CHECKER
X3	1-579-063-21	s RESONATOR, CERAMIC 4.19000MHz

DAD-33P BOARD(PCS-G510P)

Ref. No. or Q'ty	Part No.	SP Description
1pc	3-179-084-01	s LEVER (R), PC BOARD
1pc	7-682-649-09	s SCREW +PS 3X10
1pc	7-682-947-01	s SCREW +PSW 3X6
1pc	7-685-871-01	s SCREW +BVTT 3X6 (S)
C3	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C4	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C5	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C101	1-115-155-11	s ELECT 22uF 20% 16V
C102	1-115-155-11	s ELECT 22uF 20% 16V
C103	1-115-155-11	s ELECT 22uF 20% 16V
C104	1-162-915-11	s CERAMIC, CHIP 10PF 50V
C105	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C106	1-162-907-11	s CERAMIC, CHIP 2PF 50V
C107	1-162-907-11	s CERAMIC, CHIP 2PF 50V
C108	1-162-907-11	s CERAMIC, CHIP 2PF 50V
C109	1-162-907-11	s CERAMIC, CHIP 2PF 50V
C110	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C111	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C112	1-162-907-11	s CERAMIC, CHIP 2PF 50V
C113	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C114	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C115	1-162-922-11	s CERAMIC, CHIP 39PF 5% 50V
C116	1-162-922-11	s CERAMIC, CHIP 39PF 5% 50V
C121	1-126-400-11	s ELECT, CHIP 22uF 20% 35V
C122	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C123	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C124	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C125	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C126	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C127	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C128	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C129	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C130	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C131	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C132	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C201	1-126-402-11	s ELECT, CHIP 2.2uF 20% 50V
C202	1-115-340-11	s CERAMIC 0.22uF 10% 25V
C203	1-115-340-11	s CERAMIC 0.22uF 10% 25V
C204	1-126-401-11	s ELECT, CHIP 1uF 20% 50V
C205	1-107-826-91	s CERAMIC 0.1uF 10% 16V
C206	1-115-340-11	s CERAMIC 0.22uF 10% 25V
C207	1-126-401-11	s ELECT, CHIP 1uF 20% 50V
C208	1-162-970-11	s CERAMIC, CHIP 0.01uF 10% 25V
C209	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C210	1-162-966-11	s CERAMIC, CHIP 0.0022uF 10% 50V
C211	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C212	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C213	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C214	1-115-340-11	s CERAMIC 0.22uF 10% 25V
C215	1-164-227-11	s CERAMIC, CHIP 0.022uF 10% 25V
C216	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C217	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C218	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C219	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C221	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C223	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C224	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C225	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C226	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V

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Ref. No. or Q'ty	Part No.	SP Description
C227	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C229	1-162-959-11	s CERAMIC, CHIP 330PF 5% 50V
C230	1-115-340-11	s CERAMIC 0.22uF 10% 25V
C231	1-107-826-91	s CERAMIC 0.1uF 10% 16V
C232	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C233	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C251	1-126-400-11	s ELECT, CHIP 22uF 20% 35V
C252	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C253	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C254	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C255	1-126-400-11	s ELECT, CHIP 22uF 20% 35V
C256	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C261	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C262	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C302	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C303	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C305	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C306	1-162-915-11	s CERAMIC, CHIP 10PF 50V
C307	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C308	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C309	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C310	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C311	1-162-915-11	s CERAMIC, CHIP 10PF 50V
C312	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C313	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C314	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C315	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C316	1-162-915-11	s CERAMIC, CHIP 10PF 50V
C317	1-126-400-11	s ELECT, CHIP 22uF 20% 35V
C318	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C319	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C320	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C321	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C322	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C323	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C324	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C325	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C326	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C327	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C328	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C329	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C330	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C331	1-162-966-11	s CERAMIC, CHIP 0.0022uF 10% 50V
C332	1-162-915-11	s CERAMIC, CHIP 10PF 50V
C333	1-162-966-11	s CERAMIC, CHIP 0.0022uF 10% 50V
C334	1-162-915-11	s CERAMIC, CHIP 10PF 50V
C335	1-162-966-11	s CERAMIC, CHIP 0.0022uF 10% 50V
C337	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C338	1-162-970-11	s CERAMIC, CHIP 0.01uF 10% 25V
C339	1-162-970-11	s CERAMIC, CHIP 0.01uF 10% 25V
C340	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C341	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C342	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C343	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C344	1-162-970-11	s CERAMIC, CHIP 0.01uF 10% 25V
C345	1-162-970-11	s CERAMIC, CHIP 0.01uF 10% 25V
C346	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C347	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C348	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V

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Ref. No. or Q'ty	Part No.	SP Description
C349	1-162-970-11	s CERAMIC, CHIP 0.01uF 10% 25V
C350	1-162-970-11	s CERAMIC, CHIP 0.01uF 10% 25V
C351	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C352	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C353	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C381	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C382	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C383	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C384	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C385	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C386	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C387	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C388	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C401	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C402	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C403	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C404	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C405	1-162-921-11	s CERAMIC, CHIP 33PF 5% 50V
C406	1-162-964-11	s CERAMIC, CHIP 0.001uF 10% 50V
C407	1-162-964-11	s CERAMIC, CHIP 0.001uF 10% 50V
C408	1-162-917-11	s CERAMIC, CHIP 15PF 5% 50V
C409	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C410	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C411	1-162-917-11	s CERAMIC, CHIP 15PF 5% 50V
C412	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C413	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C414	1-162-917-11	s CERAMIC, CHIP 15PF 5% 50V
C415	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C416	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C417	1-126-400-11	s ELECT, CHIP 22uF 20% 35V
C418	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C419	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C420	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C421	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C422	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C423	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C424	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C425	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C426	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C427	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C428	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C429	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C430	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C431	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C432	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C433	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C500	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C501	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C502	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C503	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C504	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C505	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C506	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C507	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C508	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C509	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C510	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C511	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C512	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V

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Ref. No. or Q'ty	Part No.	SP Description
C513	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C514	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C515	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C516	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C517	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C518	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C519	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C520	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C521	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C522	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C523	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C524	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C525	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C526	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C527	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C528	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C529	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C530	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C531	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C532	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C533	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C534	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C535	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C536	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C537	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C613	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C614	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C615	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C616	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C619	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
CN2	1-580-195-21	s CONNECTOR, PHEC 100P, FEMALE
CN3	1-764-642-11	o CONNECTOR, D-SUB 15P, FEMALE
CN4	1-566-848-11	s CONNECTOR, CIRCULAR 4P(S), FEMALE
CN5	1-764-642-11	o CONNECTOR, D-SUB 15P, FEMALE
CN6	1-691-591-11	o CONNECTOR 8P, MALE
D1	8-719-041-79	s DIODE MA721WA-TX
E1	1-535-757-11	s CHIP, CHECKER
E2	1-535-757-11	s CHIP, CHECKER
E3	1-535-757-11	s CHIP, CHECKER
E11	1-535-757-11	s CHIP, CHECKER
E12	1-535-757-11	s CHIP, CHECKER
E13	1-535-757-11	s CHIP, CHECKER
FL2	1-239-755-11	s FILTER, LOW-PASS
FL3	1-239-290-11	s FILTER, LOW-PASS
FL4	1-239-290-11	s FILTER, LOW-PASS
FL5	1-233-424-11	s FILTER, LOW-PASS
FL6	1-239-636-11	s FILTER, LOW-PASS
FL7	1-239-636-11	s FILTER, LOW-PASS
FL11	1-239-290-11	s FILTER, LOW-PASS
FL12	1-239-290-11	s FILTER, LOW-PASS
FL101	1-233-316-31	s FILTER, CHIP EMI
FL102	1-233-316-31	s FILTER, CHIP EMI
FL103	1-233-316-31	s FILTER, CHIP EMI
FL104	1-239-825-31	s FILTER, CHIP EMI
FL105	1-239-825-31	s FILTER, CHIP EMI
FL106	1-239-825-31	s FILTER, CHIP EMI
FL107	1-239-825-31	s FILTER, CHIP EMI

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Ref. No. or Q'ty	Part No.	SP Description
FL108	1-233-316-31	s FILTER, CHIP EMI
FL109	1-233-316-31	s FILTER, CHIP EMI
FL110	1-233-316-31	s FILTER, CHIP EMI
FL111	1-239-825-31	s FILTER, CHIP EMI
FL112	1-239-825-31	s FILTER, CHIP EMI
IC10	8-759-561-64	s IC ISPLSI1016E-80LT44-RAP00V1
IC11	8-752-073-52	s IC CXA2016S
IC12	8-759-269-09	s IC SN74HCT04ANS-E05
IC13	8-759-295-09	s IC TLC2932IPW
IC14	8-759-239-55	s IC TC74HC123AF
IC15	8-759-926-18	s IC SN74HC157ANS
IC16	8-759-081-44	s IC TC74VHC04F(EL)
IC17	8-759-186-39	s IC TC74VHC74F(EL)
IC18	8-759-186-53	s IC TC74VHC163F(EL)
IC19	8-759-186-53	s IC TC74VHC163F(EL)
IC20	8-759-186-53	s IC TC74VHC163F(EL)
IC21	8-759-271-04	s IC L1252CS8
IC22	8-752-371-18	s IC CXD2302Q
IC23	8-752-371-18	s IC CXD2302Q
IC24	8-752-371-18	s IC CXD2302Q
IC25	8-759-931-56	s IC SN74LS684NS-E05
IC26	8-759-268-95	s IC SN74HCT00ANS-E05
IC27	8-759-239-25	s IC TC74HC4066AF
IC31	8-752-380-71	s IC CXD1913Q
IC32	8-752-870-04	s IC CXP5068H-242Q
IC36	8-759-239-58	s IC TC74HC221AF
IC37	8-759-524-25	o IC TC7WH241FU(Te12R)
IC41	8-759-701-59	s IC NJM78M09FA
IC42	8-759-069-28	s IC PQ05RF11
IC43	8-759-701-87	s IC NJM7909FA
IC101	8-759-175-29	s IC TC74VHC374F(EL)
IC102	8-759-540-68	s IC UPD65646GB-Y16-9EU
IC103	8-759-926-52	s IC SN74HC257NS
IC104	8-759-175-29	s IC TC74VHC374F(EL)
IC105	8-759-175-29	s IC TC74VHC374F(EL)
IC106	8-759-175-29	s IC TC74VHC374F(EL)
IC107	8-759-174-16	s IC TC74VHC244F(EL)
IC108	8-759-186-51	s IC TC74VHC157F(EL)
IC109	8-759-186-39	s IC TC74VHC74F(EL)
IC110	8-759-186-39	s IC TC74VHC74F(EL)
IC111	8-759-186-39	s IC TC74VHC74F(EL)
IC112	8-759-186-26	s IC TC74VHC02F(EL)
IC113	8-759-179-94	s IC HM530281RTT-20
IC114	8-759-179-94	s IC HM530281RTT-20
IC115	8-759-179-94	s IC HM530281RTT-20
IC116	8-759-179-94	s IC HM530281RTT-20
IC117	8-759-540-68	s IC UPD65646GB-Y16-9EU
IC118	8-759-540-68	s IC UPD65646GB-Y16-9EU
IC119	8-759-561-63	s IC ISPLSI1032E-70LT-RAP03V1
IC120	8-759-269-09	s IC SN74HCT04ANS-E05
IC121	8-759-175-29	s IC TC74VHC374F(EL)
IC122	8-759-926-69	s IC SN74HC377ANS
IC123	8-759-186-51	s IC TC74VHC157F(EL)
IC124	8-759-186-51	s IC TC74VHC157F(EL)
IC125	8-759-186-51	s IC TC74VHC157F(EL)
IC126	8-759-540-69	s IC UPD65621GB-Y12-9EU
IC127	8-759-540-69	s IC UPD65621GB-Y12-9EU
IC128	8-759-186-51	s IC TC74VHC157F(EL)
IC129	8-759-174-16	s IC TC74VHC244F(EL)

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Ref. No. or Q'ty	Part No.	SP Description
IC130	8-759-186-39	s IC TC74VHC74F(EL)
IC131	8-759-037-79	s IC SN74HC163ANS-E05
IC132	8-759-186-39	s IC TC74VHC74F(EL)
IC133	8-759-186-26	s IC TC74VHC02F(EL)
IC134	8-759-174-16	s IC TC74VHC244F(EL)
IC135	8-759-524-25	o IC TC7WH241FU(Te12R)
IC136	8-759-447-77	s IC TC7WH74FU(Te12R)
IC137	8-759-524-25	o IC TC7WH241FU(Te12R)
JC101	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC103	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC105	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC108	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC109	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC501	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC502	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC506	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC508	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC509	1-216-864-11	s METAL, CHIP 0 5% 1/16W
L4	1-408-777-00	s INDUCTOR, CHIP 10uH
L5	1-408-785-21	s INDUCTOR, CHIP 47uH
L6	1-408-785-21	s INDUCTOR, CHIP 47uH
L7	1-408-785-21	s INDUCTOR, CHIP 47uH
L8	1-408-777-00	s INDUCTOR, CHIP 10uH
L9	1-408-777-00	s INDUCTOR, CHIP 10uH
L10	1-408-777-00	s INDUCTOR, CHIP 10uH
L11	1-408-777-00	s INDUCTOR, CHIP 10uH
L12	1-408-777-00	s INDUCTOR, CHIP 10uH
L13	1-408-777-00	s INDUCTOR, CHIP 10uH
L14	1-408-785-21	s INDUCTOR, CHIP 47uH
Q11	8-729-117-32	s TRANSISTOR 2SC4177
Q12	8-729-117-32	s TRANSISTOR 2SC4177
Q13	8-729-140-63	s TRANSISTOR 2SA1611-M5M6
Q14	8-729-117-32	s TRANSISTOR 2SC4177
Q15	8-729-117-32	s TRANSISTOR 2SC4177
Q16	8-729-117-32	s TRANSISTOR 2SC4177
Q17	8-729-117-32	s TRANSISTOR 2SC4177
Q19	8-729-117-32	s TRANSISTOR 2SC4177
Q20	8-729-117-32	s TRANSISTOR 2SC4177
Q21	8-729-117-32	s TRANSISTOR 2SC4177
Q22	8-729-117-32	s TRANSISTOR 2SC4177
Q23	8-729-117-32	s TRANSISTOR 2SC4177
Q24	8-729-117-32	s TRANSISTOR 2SC4177
Q25	8-729-117-32	s TRANSISTOR 2SC4177
Q26	8-729-117-32	s TRANSISTOR 2SC4177
Q27	8-729-117-32	s TRANSISTOR 2SC4177
Q28	8-729-117-32	s TRANSISTOR 2SC4177
Q29	8-729-117-32	s TRANSISTOR 2SC4177
Q30	8-729-117-32	s TRANSISTOR 2SC4177
Q31	8-729-117-32	s TRANSISTOR 2SC4177
Q32	8-729-117-32	s TRANSISTOR 2SC4177
Q33	8-729-117-32	s TRANSISTOR 2SC4177
Q34	8-729-117-32	s TRANSISTOR 2SC4177
Q35	8-729-117-32	s TRANSISTOR 2SC4177
Q36	8-729-117-32	s TRANSISTOR 2SC4177
Q37	8-729-117-32	s TRANSISTOR 2SC4177
Q38	8-729-117-32	s TRANSISTOR 2SC4177
Q39	8-729-117-32	s TRANSISTOR 2SC4177
Q41	8-729-117-32	s TRANSISTOR 2SC4177

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Ref. No. or Q'ty	Part No.	SP	Description
Q42	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q44	8-729-117-32	s	TRANSISTOR 2SC4177
Q45	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q46	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q47	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q48	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q49	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q53	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q54	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q55	8-729-117-32	s	TRANSISTOR 2SC4177
Q56	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q57	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q58	8-729-117-32	s	TRANSISTOR 2SC4177
Q59	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q60	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q61	8-729-117-32	s	TRANSISTOR 2SC4177
Q64	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q65	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q66	8-729-117-32	s	TRANSISTOR 2SC4177
Q67	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q68	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q69	8-729-117-32	s	TRANSISTOR 2SC4177
Q70	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q71	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q72	8-729-117-32	s	TRANSISTOR 2SC4177
Q73	8-729-117-32	s	TRANSISTOR 2SC4177
Q74	8-729-117-32	s	TRANSISTOR 2SC4177
Q75	8-729-117-32	s	TRANSISTOR 2SC4177
Q78	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q79	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q80	8-729-117-32	s	TRANSISTOR 2SC4177
Q81	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q82	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q83	8-729-117-32	s	TRANSISTOR 2SC4177
Q84	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q85	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q86	8-729-117-32	s	TRANSISTOR 2SC4177
Q87	8-729-117-32	s	TRANSISTOR 2SC4177
Q88	8-729-117-32	s	TRANSISTOR 2SC4177
Q89	8-729-117-32	s	TRANSISTOR 2SC4177
Q90	8-729-117-32	s	TRANSISTOR 2SC4177
Q91	8-729-117-32	s	TRANSISTOR 2SC4177
Q92	8-729-117-32	s	TRANSISTOR 2SC4177
Q101	8-729-117-32	s	TRANSISTOR 2SC4177
Q102	8-729-117-32	s	TRANSISTOR 2SC4177
Q103	8-729-117-32	s	TRANSISTOR 2SC4177
Q104	8-729-117-32	s	TRANSISTOR 2SC4177
Q105	8-729-117-32	s	TRANSISTOR 2SC4177
Q106	8-729-117-32	s	TRANSISTOR 2SC4177
Q107	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q108	8-729-117-32	s	TRANSISTOR 2SC4177
Q109	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q110	8-729-117-32	s	TRANSISTOR 2SC4177
Q111	8-729-117-32	s	TRANSISTOR 2SC4177
Q112	8-729-117-32	s	TRANSISTOR 2SC4177
Q113	8-729-117-32	s	TRANSISTOR 2SC4177
Q114	8-729-117-32	s	TRANSISTOR 2SC4177
Q115	8-729-117-32	s	TRANSISTOR 2SC4177
Q116	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6

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Ref. No. or Q'ty	Part No.	SP	Description
Q117	8-729-117-32	s	TRANSISTOR 2SC4177
Q118	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q119	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q120	8-729-117-32	s	TRANSISTOR 2SC4177
Q121	8-729-117-32	s	TRANSISTOR 2SC4177
Q122	8-729-117-32	s	TRANSISTOR 2SC4177
Q123	8-729-117-32	s	TRANSISTOR 2SC4177
Q124	8-729-117-32	s	TRANSISTOR 2SC4177
Q125	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q126	8-729-117-32	s	TRANSISTOR 2SC4177
Q127	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q128	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q129	8-729-117-32	s	TRANSISTOR 2SC4177
Q130	8-729-117-32	s	TRANSISTOR 2SC4177
Q131	8-729-117-32	s	TRANSISTOR 2SC4177
Q132	8-729-117-32	s	TRANSISTOR 2SC4177
Q133	8-729-117-32	s	TRANSISTOR 2SC4177
Q134	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q135	8-729-117-32	s	TRANSISTOR 2SC4177
Q136	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q137	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q138	8-729-117-32	s	TRANSISTOR 2SC4177
Q139	8-729-117-32	s	TRANSISTOR 2SC4177
Q140	8-729-117-32	s	TRANSISTOR 2SC4177
Q141	8-729-117-32	s	TRANSISTOR 2SC4177
Q142	8-729-117-32	s	TRANSISTOR 2SC4177
Q143	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
Q144	8-729-117-32	s	TRANSISTOR 2SC4177
Q145	8-729-140-63	s	TRANSISTOR 2SA1611-M5M6
R31	1-216-837-11	s	METAL, CHIP 22K 5% 1/16W
R32	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R41	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R45	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R54	1-216-845-11	s	METAL, CHIP 100K 5% 1/16W
R55	1-216-845-11	s	METAL, CHIP 100K 5% 1/16W
R100	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R101	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R102	1-216-833-11	s	METAL, CHIP 10K 5% 1/16W
R103	1-211-990-11	s	METAL, CHIP 75 0.5% 1/16W
R104	1-216-839-11	s	METAL, CHIP 33K 5% 1/16W
R105	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R106	1-216-827-11	s	METAL, CHIP 3.3K 5% 1/16W
R107	1-211-990-11	s	METAL, CHIP 75 0.5% 1/16W
R108	1-216-839-11	s	METAL, CHIP 33K 5% 1/16W
R109	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R110	1-216-827-11	s	METAL, CHIP 3.3K 5% 1/16W
R111	1-216-829-11	s	METAL, CHIP 4.7K 5% 1/16W
R112	1-211-990-11	s	METAL, CHIP 75 0.5% 1/16W
R113	1-216-839-11	s	METAL, CHIP 33K 5% 1/16W
R114	1-216-809-11	s	METAL, CHIP 100 5% 1/16W
R115	1-216-827-11	s	METAL, CHIP 3.3K 5% 1/16W
R116	1-218-839-11	s	METAL, CHIP 470 0.5% 1/16W
R117	1-211-979-11	s	METAL, CHIP 27 0.5% 1/16W
R118	1-218-832-11	s	METAL, CHIP 240 0.5% 1/16W
R119	1-211-973-11	s	METAL, CHIP 15 0.5% 1/16W
R120	1-218-848-11	s	METAL, CHIP 1.1K 0.5% 1/16W
R121	1-218-833-11	s	METAL, CHIP 270 0.5% 1/16W
R122	1-216-817-11	s	METAL, CHIP 470 5% 1/16W
R123	1-216-809-11	s	METAL, CHIP 100 5% 1/16W

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Ref. No. or Q'ty	Part No.	SP Description
R124	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R125	1-216-815-11	s METAL, CHIP 330 5% 1/16W
R126	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R127	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R128	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R129	1-218-839-11	s METAL, CHIP 470 0.5% 1/16W
R130	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R131	1-218-829-11	s METAL, CHIP 180 0.5% 1/16W
R132	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R133	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R134	1-218-877-11	s METAL, CHIP 18K 0.5% 1/16W
R135	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R136	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R137	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R138	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R139	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R140	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R141	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R142	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R143	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R144	1-218-832-11	s METAL, CHIP 240 0.5% 1/16W
R145	1-211-973-11	s METAL, CHIP 15 0.5% 1/16W
R146	1-218-839-11	s METAL, CHIP 470 0.5% 1/16W
R147	1-211-979-11	s METAL, CHIP 27 0.5% 1/16W
R148	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R149	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R151	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R152	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R153	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R154	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R155	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R156	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R157	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R158	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R159	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R160	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R161	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R162	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R163	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R164	1-218-848-11	s METAL, CHIP 1.1K 0.5% 1/16W
R165	1-218-833-11	s METAL, CHIP 270 0.5% 1/16W
R166	1-218-832-11	s METAL, CHIP 240 0.5% 1/16W
R167	1-211-973-11	s METAL, CHIP 15 0.5% 1/16W
R168	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R169	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R171	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R172	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R173	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R174	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R175	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R176	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R178	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R179	1-218-839-11	s METAL, CHIP 470 0.5% 1/16W
R180	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R181	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R182	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R183	1-218-849-11	s METAL, CHIP 1.2K 0.5% 1/16W
R184	1-211-969-11	s METAL, CHIP 10 0.5% 1/16W
R185	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W

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Ref. No. or Q'ty	Part No.	SP Description
R186	1-218-841-11	s METAL, CHIP 560 0.5% 1/16W
R187	1-218-865-11	s METAL, CHIP 5.6K 0.5% 1/16W
R188	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R189	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R190	1-218-849-11	s METAL, CHIP 1.2K 0.5% 1/16W
R191	1-211-969-11	s METAL, CHIP 10 0.5% 1/16W
R192	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R193	1-218-841-11	s METAL, CHIP 560 0.5% 1/16W
R194	1-218-865-11	s METAL, CHIP 5.6K 0.5% 1/16W
R195	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R201	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R203	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R204	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R205	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R206	1-216-839-11	s METAL, CHIP 33K 5% 1/16W
R207	1-216-814-11	s METAL, CHIP 270 5% 1/16W
R208	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R209	1-218-873-11	s METAL, CHIP 12K 0.5% 1/16W
R210	1-218-873-11	s METAL, CHIP 12K 0.5% 1/16W
R211	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R212	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R215	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R216	1-216-836-11	s METAL, CHIP 18K 5% 1/16W
R217	1-216-826-11	s METAL, CHIP 2.7K 5% 1/16W
R218	1-218-858-11	s METAL, CHIP 3K 0.5% 1/16W
R219	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R220	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R222	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R224	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R225	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R226	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R227	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R228	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R229	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R232	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R233	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R234	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R235	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R236	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R238	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R239	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R240	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R241	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R242	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R243	1-216-849-11	s METAL, CHIP 220K 5% 1/16W
R244	1-216-839-11	s METAL, CHIP 33K 5% 1/16W
R245	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R251	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R252	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R261	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R262	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R263	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R264	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R266	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R267	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R268	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R269	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R271	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R272	1-216-845-11	s METAL, CHIP 100K 5% 1/16W

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(DAD-33P BOARD(PCS-G510P))

Ref. No. or Q'ty	Part No.	SP Description
R273	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R274	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R281	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R282	1-216-823-11	s METAL, CHIP 1.5K 5% 1/16W
R283	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R284	1-216-823-11	s METAL, CHIP 1.5K 5% 1/16W
R285	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R286	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R287	1-216-823-11	s METAL, CHIP 1.5K 5% 1/16W
R291	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R292	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R293	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R308	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R309	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R310	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R311	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R312	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R313	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R314	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R315	1-216-815-11	s METAL, CHIP 330 5% 1/16W
R316	1-216-824-11	s METAL, CHIP 1.8K 5% 1/16W
R318	1-216-807-11	s METAL, CHIP 68 5% 1/16W
R325	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R326	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R327	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R328	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R329	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R330	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R331	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R332	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R333	1-216-814-11	s METAL, CHIP 270 5% 1/16W
R334	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R335	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R336	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R337	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R338	1-216-807-11	s METAL, CHIP 68 5% 1/16W
R345	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R346	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R347	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R348	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R349	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R350	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R351	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R352	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R353	1-216-814-11	s METAL, CHIP 270 5% 1/16W
R354	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R355	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R356	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R357	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R358	1-216-807-11	s METAL, CHIP 68 5% 1/16W
R359	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R360	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R361	1-216-831-11	s METAL, CHIP 6.8K 5% 1/16W
R362	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R363	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R364	1-216-831-11	s METAL, CHIP 6.8K 5% 1/16W
R365	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R366	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R367	1-216-831-11	s METAL, CHIP 6.8K 5% 1/16W

(DAD-33P BOARD(PCS-G510P))

Ref. No. or Q'ty	Part No.	SP Description
R368	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R369	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R370	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R371	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R372	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R373	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R374	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R375	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R376	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R377	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R378	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R379	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R381	1-218-859-11	s METAL, CHIP 3.3K 0.5% 1/16W
R382	1-218-859-11	s METAL, CHIP 3.3K 0.5% 1/16W
R383	1-218-855-11	s METAL, CHIP 2.2K 0.5% 1/16W
R384	1-218-830-11	s METAL, CHIP 200 0.5% 1/16W
R385	1-218-830-11	s METAL, CHIP 200 0.5% 1/16W
R386	1-218-830-11	s METAL, CHIP 200 0.5% 1/16W
R387	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R401	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R402	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R403	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R404	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R405	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R406	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R407	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R408	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R409	1-216-815-11	s METAL, CHIP 330 5% 1/16W
R410	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R411	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R412	1-216-823-11	s METAL, CHIP 1.5K 5% 1/16W
R413	1-216-813-11	s METAL, CHIP 220 5% 1/16W
R414	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R415	1-216-830-11	s METAL, CHIP 5.6K 5% 1/16W
R416	1-216-839-11	s METAL, CHIP 33K 5% 1/16W
R417	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R418	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R419	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R420	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R421	1-211-989-11	s METAL, CHIP 68 0.5% 1/16W
R422	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R423	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R424	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R425	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R426	1-218-847-11	s METAL, CHIP 1K 0.5% 1/16W
R427	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R428	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R429	1-216-815-11	s METAL, CHIP 330 5% 1/16W
R430	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R431	1-216-823-11	s METAL, CHIP 1.5K 5% 1/16W
R432	1-216-830-11	s METAL, CHIP 5.6K 5% 1/16W
R433	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R434	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R435	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R436	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R437	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R438	1-211-989-11	s METAL, CHIP 68 0.5% 1/16W
R439	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R440	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W

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Ref. No. or Q'ty	Part No.	SP Description
R441	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R442	1-218-835-11	s METAL, CHIP 330 0.5% 1/16W
R443	1-218-835-11	s METAL, CHIP 330 0.5% 1/16W
R444	1-218-850-11	s METAL, CHIP 1.3K 0.5% 1/16W
R445	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R446	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R447	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R448	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R449	1-216-839-11	s METAL, CHIP 33K 5% 1/16W
R450	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R451	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R452	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R453	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R454	1-211-989-11	s METAL, CHIP 68 0.5% 1/16W
R455	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R456	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R457	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R458	1-218-835-11	s METAL, CHIP 330 0.5% 1/16W
R459	1-218-835-11	s METAL, CHIP 330 0.5% 1/16W
R460	1-218-850-11	s METAL, CHIP 1.3K 0.5% 1/16W
R461	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R462	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R463	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R464	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R465	1-216-839-11	s METAL, CHIP 33K 5% 1/16W
R466	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R467	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R468	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R469	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R470	1-211-989-11	s METAL, CHIP 68 0.5% 1/16W
R471	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R472	1-216-827-11	s METAL, CHIP 3.3K 5% 1/16W
R473	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R474	1-218-835-11	s METAL, CHIP 330 0.5% 1/16W
R475	1-218-835-11	s METAL, CHIP 330 0.5% 1/16W
R476	1-218-850-11	s METAL, CHIP 1.3K 0.5% 1/16W
R477	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R478	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R479	1-216-817-11	s METAL, CHIP 470 5% 1/16W
R480	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R481	1-216-839-11	s METAL, CHIP 33K 5% 1/16W
R482	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R483	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R484	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R485	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R486	1-211-989-11	s METAL, CHIP 68 0.5% 1/16W
R487	1-218-825-11	s METAL, CHIP 120 0.5% 1/16W
R488	1-218-825-11	s METAL, CHIP 120 0.5% 1/16W
R489	1-218-825-11	s METAL, CHIP 120 0.5% 1/16W
R494	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R495	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R501	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R502	1-216-789-11	s METAL, CHIP 2.2 5% 1/16W
R503	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R504	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R505	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R506	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R507	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R508	1-216-845-11	s METAL, CHIP 100K 5% 1/16W

(DAD-33P BOARD(PCS-G510P))

Ref. No. or Q'ty	Part No.	SP Description
R509	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R510	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R511	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R512	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R513	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R514	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R515	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R516	1-216-809-11	s METAL, CHIP 100 5% 1/16W
R517	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R518	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R519	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R520	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R521	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R522	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R523	1-216-807-11	s METAL, CHIP 68 5% 1/16W
R524	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R525	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R526	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R527	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R528	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R529	1-216-797-11	s METAL, CHIP 10 5% 1/16W
RB501	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB502	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB503	1-239-409-11	s RESISTOR BLOCK, CHIP 47x4
RB504	1-239-409-11	s RESISTOR BLOCK, CHIP 47x4
RB505	1-239-409-11	s RESISTOR BLOCK, CHIP 47x4
RB506	1-239-409-11	s RESISTOR BLOCK, CHIP 47x4
RB507	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB508	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB509	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB510	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB511	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB512	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB513	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB514	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB515	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB516	1-239-412-11	s RESISTOR BLOCK, CHIP 100x4
RB517	1-239-412-11	s RESISTOR BLOCK, CHIP 100x4
RB518	1-239-412-11	s RESISTOR BLOCK, CHIP 100x4
RB519	1-239-412-11	s RESISTOR BLOCK, CHIP 100x4
RV1	1-238-852-11	s RES, ADJ, METAL 470
RV2	1-238-852-11	s RES, ADJ, METAL 470
RV3	1-238-852-11	s RES, ADJ, METAL 470
RV7	1-238-853-11	s RES, ADJ, METAL 1K
RV8	1-238-853-11	s RES, ADJ, METAL 1K
TH1	1-810-106-11	s THERMISTOR, POSITIVE LINEAR
TH2	1-810-106-11	s THERMISTOR, POSITIVE LINEAR
TH3	1-810-106-11	s THERMISTOR, POSITIVE LINEAR
TP6	1-535-757-11	s CHIP, CHECKER
TP7	1-535-757-11	s CHIP, CHECKER
TP8	1-535-757-11	s CHIP, CHECKER
TP9	1-535-757-11	s CHIP, CHECKER
TP10	1-535-757-11	s CHIP, CHECKER
TP11	1-535-757-11	s CHIP, CHECKER
TP12	1-535-757-11	s CHIP, CHECKER
TP13	1-535-757-11	s CHIP, CHECKER
TP14	1-535-757-11	s CHIP, CHECKER
TP15	1-535-757-11	s CHIP, CHECKER

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(DAD-33P BOARD(PCS-G510P))

Ref. No. or Q'ty	Part No.	SP Description
TP16	1-535-757-11	s CHIP, CHECKER
TP17	1-535-757-11	s CHIP, CHECKER
TP18	1-535-757-11	s CHIP, CHECKER
TP19	1-535-757-11	s CHIP, CHECKER
TP20	1-535-757-11	s CHIP, CHECKER
TP21	1-535-757-11	s CHIP, CHECKER
TP22	1-535-757-11	s CHIP, CHECKER
TP23	1-535-757-11	s CHIP, CHECKER
TP24	1-535-757-11	s CHIP, CHECKER
TP25	1-535-757-11	s CHIP, CHECKER
TP26	1-535-757-11	s CHIP, CHECKER
TP27	1-535-757-11	s CHIP, CHECKER
TP28	1-535-757-11	s CHIP, CHECKER
TP29	1-535-757-11	s CHIP, CHECKER
TP30	1-535-757-11	s CHIP, CHECKER
TP31	1-535-757-11	s CHIP, CHECKER
TP32	1-535-757-11	s CHIP, CHECKER
TP33	1-535-757-11	s CHIP, CHECKER
TP34	1-535-757-11	s CHIP, CHECKER
TP35	1-535-757-11	s CHIP, CHECKER
TP36	1-535-757-11	s CHIP, CHECKER
TP37	1-535-757-11	s CHIP, CHECKER
TP38	1-535-757-11	s CHIP, CHECKER
TP39	1-535-757-11	s CHIP, CHECKER
TP40	1-535-757-11	s CHIP, CHECKER
X3	1-579-063-21	s RESONATOR, CERAMIC 4.19000MHZ

IF-540 BOARD(PCS-P500)

Ref. No. or Q'ty	Part No.	SP Description
1pc	A-8272-637-A	o MOUNTED CIRCUIT BOARD, IF-540
1pc	3-179-084-01	s LEVER (R), PC BOARD
1pc	7-682-947-01	s SCREW +PSW 3X6
C1	1-163-038-91	s CERAMIC 0.1uF 25V
C2	1-163-038-91	s CERAMIC 0.1uF 25V
C3	1-163-038-91	s CERAMIC 0.1uF 25V
C4	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C6	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C8	1-126-395-11	s ELECT, CHIP 22uF 20% 16V
C40	1-135-176-21	s TANTALUM, CHIP 0.68uF 20% 35V
C41	1-164-004-11	s CERAMIC, CHIP 0.1uF 10% 25V
C100	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C101	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C104	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C105	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C106	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C107	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C108	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C109	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C110	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C111	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C112	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C113	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C114	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C115	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C116	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C117	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C118	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C119	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C120	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C121	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C122	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C123	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C124	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C125	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C126	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C127	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C128	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C130	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C131	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C132	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C134	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C135	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C136	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C137	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C138	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C139	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C204	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C207	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C210	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C304	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C307	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C310	1-163-021-91	s CERAMIC 0.01uF 10% 50V
CN1	1-580-195-21	s CONNECTOR, PHEC 100P, FEMALE
CN2	1-774-777-21	s CONNECTOR, BB 40P, FEMALE
CN3	1-750-944-11	s JACK, MODULAR (8P-8C), FEMALE
CN4	1-750-944-11	s JACK, MODULAR (8P-8C), FEMALE
CN5	1-750-944-11	s JACK, MODULAR (8P-8C), FEMALE

(IF-540 BOARD(PCS-P500))

Ref. No. or Q'ty	Part No.	SP Description
CN6	1-750-874-21	s CONNECTOR, BB 60P, MALE
CNI5	1-540-151-21	s SOCKET, IC 32P
CNI8	1-540-151-21	s SOCKET, IC 32P
CNI11	1-540-151-21	s SOCKET, IC 32P
D1	8-719-107-58	s DIODE 1S953-7-T1
D2	8-719-107-58	s DIODE 1S953-7-T1
D3	8-719-107-58	s DIODE 1S953-7-T1
D4	8-719-107-58	s DIODE 1S953-7-T1
D5	8-719-107-58	s DIODE 1S953-7-T1
D6	8-719-107-58	s DIODE 1S953-7-T1
D7	8-719-107-58	s DIODE 1S953-7-T1
D8	8-719-107-58	s DIODE 1S953-7-T1
D9	8-719-107-58	s DIODE 1S953-7-T1
D10	8-719-107-58	s DIODE 1S953-7-T1
D11	8-719-107-58	s DIODE 1S953-7-T1
D12	8-719-107-58	s DIODE 1S953-7-T1
D13	8-719-107-58	s DIODE 1S953-7-T1
D14	8-719-107-58	s DIODE 1S953-7-T1
D15	8-719-107-58	s DIODE 1S953-7-T1
D16	8-719-107-58	s DIODE 1S953-7-T1
D17	8-719-107-58	s DIODE 1S953-7-T1
D18	8-719-107-58	s DIODE 1S953-7-T1
D19	8-719-107-58	s DIODE 1S953-7-T1
D20	8-719-107-58	s DIODE 1S953-7-T1
D21	8-719-107-58	s DIODE 1S953-7-T1
D22	8-719-107-58	s DIODE 1S953-7-T1
D23	8-719-107-58	s DIODE 1S953-7-T1
D24	8-719-107-58	s DIODE 1S953-7-T1
D25	8-719-107-58	s DIODE 1S953-7-T1
D26	8-719-107-58	s DIODE 1S953-7-T1
D27	8-719-107-58	s DIODE 1S953-7-T1
D28	8-719-107-58	s DIODE 1S953-7-T1
D29	8-719-107-58	s DIODE 1S953-7-T1
D30	8-719-107-58	s DIODE 1S953-7-T1
D31	8-719-107-58	s DIODE 1S953-7-T1
D32	8-719-107-58	s DIODE 1S953-7-T1
D33	8-719-107-58	s DIODE 1S953-7-T1
D34	8-719-107-58	s DIODE 1S953-7-T1
D35	8-719-107-58	s DIODE 1S953-7-T1
D36	8-719-107-58	s DIODE 1S953-7-T1
D37	8-719-801-36	s DIODE 1G4B42
D38	8-719-801-36	s DIODE 1G4B42
D39	8-719-801-36	s DIODE 1G4B42
D43	8-719-107-58	s DIODE 1S953-7-T1
D44	8-719-107-58	s DIODE 1S953-7-T1
D45	8-719-107-58	s DIODE 1S953-7-T1
D46	8-719-107-58	s DIODE 1S953-7-T1
D47	8-719-107-58	s DIODE 1S953-7-T1
D48	8-719-107-58	s DIODE 1S953-7-T1
IC1	△ 8-749-012-09	s IC TLP553
IC2	△ 8-749-012-09	s IC TLP553
IC3	△ 8-749-012-09	s IC TLP553
IC4	8-759-361-88	s IC HD81504FE
IC5	8-759-577-44	o IC M27C256B-12C1-BRIV3.2
IC6	8-759-577-64	s IC CY6264-70SNC-T2
IC7	8-759-361-88	s IC HD81504FE
IC8	8-759-577-44	o IC M27C256B-12C1-BRIV3.2
IC9	8-759-577-64	s IC CY6264-70SNC-T2

(IF-540 BOARD(PCS-P500))

Ref. No. or Q'ty	Part No.	SP Description
IC10	8-759-361-88	s IC HD81504FE
IC11	8-759-577-44	o IC M27C256B-12C1-BRIV3.2
IC12	8-759-577-64	s IC CY6264-70SNC-T2
IC13	8-759-925-76	s IC SN74HC08ANS
IC14	8-759-926-12	s IC SN74HC139ANS
IC15	8-759-926-12	s IC SN74HC139ANS
IC16	8-759-925-85	s IC SN74HC32ANS
IC17	8-759-545-12	s IC TC74ACT244F(EL)
IC18	8-759-545-12	s IC TC74ACT244F(EL)
IC19	8-759-927-15	s IC SN74HCT245NS
IC20	8-759-926-11	s IC SN74HC138ANS
IC21	8-759-925-90	s IC SN74HC74ANS
IC22	8-759-925-90	s IC SN74HC74ANS
IC23	8-759-925-90	s IC SN74HC74ANS
IC24	8-759-925-90	s IC SN74HC74ANS
IC25	8-759-926-48	s IC SN74HC244NS
IC26	8-759-927-12	s IC SN74HCT244ANS-E05
IC27	8-759-927-12	s IC SN74HCT244ANS-E05
IC28	8-759-927-12	s IC SN74HCT244ANS-E05
IC30	8-759-925-85	s IC SN74HC32ANS
IC31	8-759-916-23	s IC SN74HC27N
IC32	8-759-925-72	s IC SN74HC02ANS
IC34	8-759-925-80	s IC SN74HC14ANS
IC35	8-759-925-90	s IC SN74HC74ANS
IC36	8-759-927-12	s IC SN74HCT244ANS-E05
IC37	8-759-927-12	s IC SN74HCT244ANS-E05
IC38	8-759-926-18	s IC SN74HC157ANS
IC39	8-759-926-18	s IC SN74HC157ANS
IC40	8-759-973-71	s IC TL7705CPS-B
JC3	1-216-295-91	s METAL, CHIP 0
JC6	1-216-295-91	s METAL, CHIP 0
JC9	1-216-295-91	s METAL, CHIP 0
JC11	1-216-295-91	s METAL, CHIP 0
JC12	1-216-295-91	s METAL, CHIP 0
JC13	1-216-295-91	s METAL, CHIP 0
LF1	△ 1-239-773-11	s FILTER, EMI CHOKE
LF2	△ 1-239-773-11	s FILTER, EMI CHOKE
LF3	△ 1-239-773-11	s FILTER, EMI CHOKE
Q1	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q2	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q4	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
R1	1-216-613-11	s METAL, CHIP 27 0.5% 1/10W
R2	1-216-603-11	s METAL, CHIP 10 0.5% 1/10W
R3	1-216-613-11	s METAL, CHIP 27 0.5% 1/10W
R4	1-216-603-11	s METAL, CHIP 10 0.5% 1/10W
R6	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R7	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R9	1-216-613-11	s METAL, CHIP 27 0.5% 1/10W
R10	1-216-603-11	s METAL, CHIP 10 0.5% 1/10W
R11	1-216-613-11	s METAL, CHIP 27 0.5% 1/10W
R12	1-216-603-11	s METAL, CHIP 10 0.5% 1/10W
R14	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R15	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R17	1-216-613-11	s METAL, CHIP 27 0.5% 1/10W
R18	1-216-603-11	s METAL, CHIP 10 0.5% 1/10W
R19	1-216-613-11	s METAL, CHIP 27 0.5% 1/10W

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(IF-540 BOARD(PCS-P500))

Ref. No. or Q'ty	Part No.	SP Description
R20	1-216-603-11	s METAL, CHIP 10 0.5% 1/10W
R22	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R23	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R25	1-216-123-11	s METAL, CHIP 1.2M 5% 1/10W
R27	1-216-123-11	s METAL, CHIP 1.2M 5% 1/10W
R29	1-216-123-11	s METAL, CHIP 1.2M 5% 1/10W
R31	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R32	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R33	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R49	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R50	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R51	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R52	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R53	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R54	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R55	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R56	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R57	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R58	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R59	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R60	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R61	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R62	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R63	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R64	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R65	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R66	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R67	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R68	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R69	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R70	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R71	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R72	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R73	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R83	1-216-065-91	s METAL, CHIP 4.7K 5% 1/10W
R92	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R94	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R96	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R98	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R107	1-216-017-91	s METAL, CHIP 47 5% 1/10W
R108	1-216-017-91	s METAL, CHIP 47 5% 1/10W
R109	1-216-017-91	s METAL, CHIP 47 5% 1/10W
R110	1-216-017-91	s METAL, CHIP 47 5% 1/10W
R111	1-216-017-91	s METAL, CHIP 47 5% 1/10W
R112	1-216-017-91	s METAL, CHIP 47 5% 1/10W
R113	1-216-017-91	s METAL, CHIP 47 5% 1/10W
R114	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R115	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R116	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R117	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R118	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
RB1	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB2	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB3	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB4	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB5	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB6	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB7	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8

(IF-540 BOARD(PCS-P500))

Ref. No. or Q'ty	Part No.	SP Description
RB8	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB9	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB10	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB11	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB12	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB13	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB14	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB15	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB16	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
SW1	1-570-619-11	s SWITCH, DIP 3-CKT
T1	△ 1-429-577-11	s TRANSFORMER, INPUT/OUTPUT
T2	△ 1-429-577-11	s TRANSFORMER, INPUT/OUTPUT
T3	△ 1-429-577-11	s TRANSFORMER, INPUT/OUTPUT
T4	△ 1-429-577-11	s TRANSFORMER, INPUT/OUTPUT
T5	△ 1-429-577-11	s TRANSFORMER, INPUT/OUTPUT
T6	△ 1-429-577-11	s TRANSFORMER, INPUT/OUTPUT
VDR1	1-810-263-11	s VARISTOR ERZ-C05DK271U
VDR2	1-810-263-11	s VARISTOR ERZ-C05DK271U
VDR3	1-810-263-11	s VARISTOR ERZ-C05DK271U
VDR4	1-810-263-11	s VARISTOR ERZ-C05DK271U
VDR5	1-810-263-11	s VARISTOR ERZ-C05DK271U
VDR6	1-810-263-11	s VARISTOR ERZ-C05DK271U
VDR7	1-810-263-11	s VARISTOR ERZ-C05DK271U
VDR8	1-810-263-11	s VARISTOR ERZ-C05DK271U
VDR9	1-810-263-11	s VARISTOR ERZ-C05DK271U
VDR10	1-810-263-11	s VARISTOR ERZ-C05DK271U
VDR11	1-810-263-11	s VARISTOR ERZ-C05DK271U
VDR12	1-810-263-11	s VARISTOR ERZ-C05DK271U

IF-540P BOARD(PCS-P500P)

Ref. No. or Q'ty	Part No.	SP Description
1pc	A-8272-623-B	o MOUNTED CIRCUIT BOARD, IF-540P
1pc	3-179-084-01	s LEVER (R), PC BOARD
1pc	7-682-947-01	s SCREW +PSW 3X6
C1	1-163-038-91	s CERAMIC 0.1uF 25V
C2	1-163-038-91	s CERAMIC 0.1uF 25V
C3	1-163-038-91	s CERAMIC 0.1uF 25V
C40	1-135-176-21	s TANTALUM, CHIP 0.68uF 20% 35V
C41	1-164-004-11	s CERAMIC, CHIP 0.1uF 10% 25V
C100	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C101	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C104	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C105	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C106	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C107	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C108	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C109	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C110	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C111	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C112	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C113	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C114	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C115	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C116	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C117	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C118	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C119	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C120	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C121	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C122	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C123	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C124	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C125	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C126	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C127	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C128	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C130	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C131	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C132	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C135	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C136	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C137	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C138	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C139	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C204	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C207	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C210	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C304	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C307	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C310	1-163-021-91	s CERAMIC 0.01uF 10% 50V
CN1	1-580-195-21	s CONNECTOR, PHEC 100P, FEMALE
CN2	1-774-777-21	s CONNECTOR, BB 40P, FEMALE
CN3	1-750-944-11	s JACK, MODULAR (8P-8C), FEMALE
CN4	1-750-944-11	s JACK, MODULAR (8P-8C), FEMALE
CN5	1-750-944-11	s JACK, MODULAR (8P-8C), FEMALE
CN6	1-750-874-21	s CONNECTOR, BB 60P, MALE
CNI5	1-540-151-21	s SOCKET, IC 32P
CNI8	1-540-151-21	s SOCKET, IC 32P

(IF-540P BOARD(PCS-P500P))

Ref. No. or Q'ty	Part No.	SP Description
CNI11	1-540-151-21	s SOCKET, IC 32P
D1	8-719-800-76	s DIODE 1SS226
D2	8-719-800-76	s DIODE 1SS226
D3	8-719-800-76	s DIODE 1SS226
D4	8-719-800-76	s DIODE 1SS226
D5	8-719-800-76	s DIODE 1SS226
D6	8-719-800-76	s DIODE 1SS226
D7	8-719-800-76	s DIODE 1SS226
D8	8-719-800-76	s DIODE 1SS226
D9	8-719-800-76	s DIODE 1SS226
D10	8-719-800-76	s DIODE 1SS226
D11	8-719-800-76	s DIODE 1SS226
D12	8-719-800-76	s DIODE 1SS226
D13	8-719-800-76	s DIODE 1SS226
D14	8-719-800-76	s DIODE 1SS226
D15	8-719-800-76	s DIODE 1SS226
D16	8-719-800-76	s DIODE 1SS226
D17	8-719-800-76	s DIODE 1SS226
D18	8-719-800-76	s DIODE 1SS226
D19	8-719-800-76	s DIODE 1SS226
D20	8-719-800-76	s DIODE 1SS226
D21	8-719-800-76	s DIODE 1SS226
D22	8-719-800-76	s DIODE 1SS226
D23	8-719-800-76	s DIODE 1SS226
D24	8-719-800-76	s DIODE 1SS226
D25	8-719-800-76	s DIODE 1SS226
D26	8-719-800-76	s DIODE 1SS226
D27	8-719-800-76	s DIODE 1SS226
D28	8-719-800-76	s DIODE 1SS226
D29	8-719-800-76	s DIODE 1SS226
D30	8-719-800-76	s DIODE 1SS226
D31	8-719-800-76	s DIODE 1SS226
D32	8-719-800-76	s DIODE 1SS226
D33	8-719-800-76	s DIODE 1SS226
D34	8-719-800-76	s DIODE 1SS226
D35	8-719-800-76	s DIODE 1SS226
D36	8-719-800-76	s DIODE 1SS226
IC4	8-759-396-70	s IC HD81504RFE
IC5	8-759-577-44	o IC M27C256B-12C1-BRIV3.2
IC6	8-759-577-64	s IC CY6264-70SNC-T2
IC7	8-759-396-70	s IC HD81504RFE
IC8	8-759-577-44	o IC M27C256B-12C1-BRIV3.2
IC9	8-759-577-64	s IC CY6264-70SNC-T2
IC10	8-759-396-70	s IC HD81504RFE
IC11	8-759-577-44	o IC M27C256B-12C1-BRIV3.2
IC12	8-759-577-64	s IC CY6264-70SNC-T2
IC13	8-759-925-76	s IC SN74HC08ANS
IC14	8-759-926-12	s IC SN74HC139ANS
IC15	8-759-926-12	s IC SN74HC139ANS
IC16	8-759-925-85	s IC SN74HC32ANS
IC17	8-759-545-12	s IC TC74ACT244F(EL)
IC18	8-759-545-12	s IC TC74ACT244F(EL)
IC19	8-759-927-15	s IC SN74HCT245NS
IC20	8-759-926-11	s IC SN74HC138ANS
IC21	8-759-925-90	s IC SN74HC74ANS
IC22	8-759-925-90	s IC SN74HC74ANS
IC23	8-759-925-90	s IC SN74HC74ANS

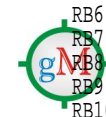
28 (PCS-5100/5100P-J, E)

(IF-540P BOARD(PCS-P500P))

Ref. No. or Q'ty	Part No.	SP Description
IC24	8-759-925-90	s IC SN74HC74ANS
IC25	8-759-926-48	s IC SN74HC244NS
IC26	8-759-927-12	s IC SN74HCT244ANS-E05
IC27	8-759-927-12	s IC SN74HCT244ANS-E05
IC28	8-759-927-12	s IC SN74HCT244ANS-E05
IC30	8-759-925-85	s IC SN74HC32ANS
IC31	8-759-916-23	s IC SN74HC27N
IC32	8-759-925-72	s IC SN74HC02ANS
IC35	8-759-925-90	s IC SN74HC74ANS
IC36	8-759-927-12	s IC SN74HCT244ANS-E05
IC37	8-759-927-12	s IC SN74HCT244ANS-E05
IC38	8-759-926-18	s IC SN74HC157ANS
IC39	8-759-926-18	s IC SN74HC157ANS
IC40	8-759-973-71	s IC TL7705CPS-B
LF1	△ 1-239-773-11	s FILTER, EMI CHOKE
LF2	△ 1-239-773-11	s FILTER, EMI CHOKE
LF3	△ 1-239-773-11	s FILTER, EMI CHOKE
Q1	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
R1	1-211-960-11	s METAL, CHIP 24 0.5% 1/10W
R2	1-216-603-11	s METAL, CHIP 10 0.5% 1/10W
R3	1-211-960-11	s METAL, CHIP 24 0.5% 1/10W
R4	1-216-603-11	s METAL, CHIP 10 0.5% 1/10W
R6	1-208-792-11	s METAL, CHIP 2.7K 0.5% 1/10W
R7	1-208-792-11	s METAL, CHIP 2.7K 0.5% 1/10W
R9	1-211-960-11	s METAL, CHIP 24 0.5% 1/10W
R10	1-216-603-11	s METAL, CHIP 10 0.5% 1/10W
R11	1-211-960-11	s METAL, CHIP 24 0.5% 1/10W
R12	1-216-603-11	s METAL, CHIP 10 0.5% 1/10W
R14	1-208-792-11	s METAL, CHIP 2.7K 0.5% 1/10W
R15	1-208-792-11	s METAL, CHIP 2.7K 0.5% 1/10W
R17	1-211-960-11	s METAL, CHIP 24 0.5% 1/10W
R18	1-216-603-11	s METAL, CHIP 10 0.5% 1/10W
R19	1-211-960-11	s METAL, CHIP 24 0.5% 1/10W
R20	1-216-603-11	s METAL, CHIP 10 0.5% 1/10W
R22	1-208-792-11	s METAL, CHIP 2.7K 0.5% 1/10W
R23	1-208-792-11	s METAL, CHIP 2.7K 0.5% 1/10W
R49	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R50	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R51	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R52	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R53	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R54	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R55	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R56	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R57	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R58	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R59	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R60	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R61	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R62	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R63	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R64	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R65	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R66	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R67	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R68	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R69	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R70	1-216-025-91	s METAL, CHIP 100 5% 1/10W

(IF-540P BOARD(PCS-P500P))

Ref. No. or Q'ty	Part No.	SP Description
R71	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R72	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R73	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R83	1-216-065-91	s METAL, CHIP 4.7K 5% 1/10W
R92	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R94	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R96	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R98	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R107	1-216-017-91	s METAL, CHIP 47 5% 1/10W
R108	1-216-017-91	s METAL, CHIP 47 5% 1/10W
R109	1-216-017-91	s METAL, CHIP 47 5% 1/10W
R110	1-216-017-91	s METAL, CHIP 47 5% 1/10W
R111	1-216-017-91	s METAL, CHIP 47 5% 1/10W
R112	1-216-017-91	s METAL, CHIP 47 5% 1/10W
R113	1-216-017-91	s METAL, CHIP 47 5% 1/10W
R114	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R115	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R116	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R117	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R118	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
RB1	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB2	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB3	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB4	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB5	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB6	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB7	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB8	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB9	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB10	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB11	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB12	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
RB13	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB14	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB15	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB16	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8
T1	△ 1-429-630-11	s TRANSFORMER, INPUT/OUTPUT
T2	△ 1-429-630-11	s TRANSFORMER, INPUT/OUTPUT
T3	△ 1-429-630-11	s TRANSFORMER, INPUT/OUTPUT
T4	△ 1-429-630-11	s TRANSFORMER, INPUT/OUTPUT
T5	△ 1-429-630-11	s TRANSFORMER, INPUT/OUTPUT
T6	△ 1-429-630-11	s TRANSFORMER, INPUT/OUTPUT



IF-541 BOARD(PCS-I510)

(IF-541 BOARD(PCS-I510))

Ref. No. or Q'ty	Part No.	SP Description
1pc	3-179-084-01	s LEVER (R), PC BOARD
1pc	7-621-259-55	s SCREW +P 2.6X8
1pc	7-682-947-01	s SCREW +PSW 3X6
C101	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C102	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C103	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C104	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C105	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C106	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C107	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C108	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C109	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C110	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C111	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C112	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C113	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C114	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C115	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C116	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C117	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C118	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C119	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C120	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C121	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C122	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C123	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C124	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C125	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C126	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C127	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C128	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C129	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C130	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C131	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C132	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C133	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C134	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C135	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C136	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C137	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C138	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C139	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C140	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C209	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C309	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C500	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C501	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
CN1	1-580-195-21	s CONNECTOR, PHEC 100P, FEMALE
CN2	1-774-777-21	s CONNECTOR, BB 40P, FEMALE
CN3	1-774-138-11	s CONNECTOR 36P, FEMALE
CN4	1-774-138-11	s CONNECTOR 36P, FEMALE
CNI10	1-540-151-21	s SOCKET, IC 32P
FB1	1-543-644-11	s BEAD, FERRITE (CHIP)
FB2	1-543-644-11	s BEAD, FERRITE (CHIP)
FB3	1-543-644-11	s BEAD, FERRITE (CHIP)
FB4	1-543-644-11	s BEAD, FERRITE (CHIP)
FB5	1-543-644-11	s BEAD, FERRITE (CHIP)

Ref. No. or Q'ty	Part No.	SP Description
FB6	1-543-644-11	s BEAD, FERRITE (CHIP)
FB7	1-543-644-11	s BEAD, FERRITE (CHIP)
FB8	1-543-644-11	s BEAD, FERRITE (CHIP)
FB9	1-543-644-11	s BEAD, FERRITE (CHIP)
FB10	1-543-644-11	s BEAD, FERRITE (CHIP)
FB11	1-543-644-11	s BEAD, FERRITE (CHIP)
FB12	1-543-644-11	s BEAD, FERRITE (CHIP)
FB13	1-543-644-11	s BEAD, FERRITE (CHIP)
FB14	1-543-644-11	s BEAD, FERRITE (CHIP)
FB15	1-543-644-11	s BEAD, FERRITE (CHIP)
FB16	1-543-644-11	s BEAD, FERRITE (CHIP)
FB17	1-543-644-11	s BEAD, FERRITE (CHIP)
FB18	1-543-644-11	s BEAD, FERRITE (CHIP)
FB19	1-543-644-11	s BEAD, FERRITE (CHIP)
FB20	1-543-644-11	s BEAD, FERRITE (CHIP)
IC1	8-759-930-57	s IC SN74LS164NS
IC2	8-759-930-57	s IC SN74LS164NS
IC3	8-759-930-57	s IC SN74LS164NS
IC4	8-759-930-57	s IC SN74LS164NS
IC5	8-759-931-58	s IC SN74LS688NS
IC6	8-759-931-58	s IC SN74LS688NS
IC7	8-759-931-58	s IC SN74LS688NS
IC8	8-759-931-58	s IC SN74LS688NS
IC9	8-759-361-87	s IC HD648180W0CP6
IC10	8-759-549-64	s IC CY27C256A-120JC-X21V2
IC11	8-759-577-64	s IC CY6264-70SNC-T2
IC12	8-759-186-27	s IC TC74VHCT04F
IC13	8-759-185-71	s IC TC74VHCT74F(EL)
IC14	8-759-186-49	s IC TC74VHC139F
IC15	8-759-545-12	s IC TC74ACT244F(EL)
IC16	8-759-545-12	s IC TC74ACT244F(EL)
IC17	8-759-927-15	s IC SN74HCT245NS
IC18	8-759-186-47	s IC TC74VHC138F
IC19	8-759-926-48	s IC SN74HC244NS
IC20	8-759-927-12	s IC SN74HCT244ANS-E05
IC21	8-759-186-13	s IC TC74VHCT374F(EL)
IC22	8-759-099-37	s IC SN74HCT74ANS-E05
IC23	8-759-925-90	s IC SN74HC74ANS
IC24	8-759-099-37	s IC SN74HCT74ANS-E05
IC25	8-759-186-38	s IC TC74VHC32F
IC26	8-759-186-38	s IC TC74VHC32F
IC27	8-759-925-72	s IC SN74HC02ANS
IC28	8-759-476-78	s IC MC3486NS
IC29	8-759-476-78	s IC MC3486NS
IC30	8-759-476-79	s IC MC3487NS
IC31	8-759-927-12	s IC SN74HCT244ANS-E05
IC32	8-759-927-12	s IC SN74HCT244ANS-E05
IC33	8-759-185-61	s IC TC74VHCT00F(EL)
IC34	8-759-185-61	s IC TC74VHCT00F(EL)
IC35	8-759-926-18	s IC SN74HC157ANS
IC36	8-759-926-18	s IC SN74HC157ANS
IC37	8-759-926-12	s IC SN74HC139ANS
IC38	8-759-185-71	s IC TC74VHCT74F(EL)
IC39	8-759-926-48	s IC SN74HC244NS
IC40	8-759-925-90	s IC SN74HC74ANS
JC1	1-216-295-91	s METAL, CHIP 0
Q1	8-729-120-28	s TRANSISTOR 2SC1623-L5L6

30 (PCS-5100/5100P-J, E)

(IF-541 BOARD(PCS-I510))

Ref. No. or Q'ty	Part No.	SP Description
R25	1-216-097-91 s	METAL, CHIP 100K 5% 1/10W
R26	1-216-097-91 s	METAL, CHIP 100K 5% 1/10W
R27	1-216-097-91 s	METAL, CHIP 100K 5% 1/10W
R28	1-216-073-00 s	METAL, CHIP 10K 5% 1/10W
R29	1-216-101-00 s	METAL, CHIP 150K 5% 1/10W
R30	1-216-101-00 s	METAL, CHIP 150K 5% 1/10W
R31	1-216-101-00 s	METAL, CHIP 150K 5% 1/10W
R32	1-216-101-00 s	METAL, CHIP 150K 5% 1/10W
R33	1-216-101-00 s	METAL, CHIP 150K 5% 1/10W
R34	1-216-101-00 s	METAL, CHIP 150K 5% 1/10W
R35	1-216-101-00 s	METAL, CHIP 150K 5% 1/10W
R36	1-216-101-00 s	METAL, CHIP 150K 5% 1/10W
R37	1-216-101-00 s	METAL, CHIP 150K 5% 1/10W
R38	1-216-101-00 s	METAL, CHIP 150K 5% 1/10W
R39	1-216-101-00 s	METAL, CHIP 150K 5% 1/10W
R40	1-216-101-00 s	METAL, CHIP 150K 5% 1/10W
R41	1-216-089-91 s	METAL, CHIP 47k 5% 1/10W
R42	1-216-089-91 s	METAL, CHIP 47k 5% 1/10W
R43	1-216-089-91 s	METAL, CHIP 47k 5% 1/10W
R44	1-216-089-91 s	METAL, CHIP 47k 5% 1/10W
R45	1-216-097-91 s	METAL, CHIP 100K 5% 1/10W
R46	1-216-097-91 s	METAL, CHIP 100K 5% 1/10W
R47	1-216-097-91 s	METAL, CHIP 100K 5% 1/10W
R48	1-216-097-91 s	METAL, CHIP 100K 5% 1/10W
R65	1-216-027-00 s	METAL, CHIP 120 5% 1/10W
RB1	1-239-309-11 s	RESISTOR BLOCK, CHIP 100kx8
RB2	1-239-309-11 s	RESISTOR BLOCK, CHIP 100kx8
RB3	1-239-309-11 s	RESISTOR BLOCK, CHIP 100kx8
RB4	1-239-309-11 s	RESISTOR BLOCK, CHIP 100kx8
RB5	1-239-309-11 s	RESISTOR BLOCK, CHIP 100kx8
S1	1-692-270-41 s	SWITCH, SLIDE
S2	1-692-270-41 s	SWITCH, SLIDE
S3	1-692-270-41 s	SWITCH, SLIDE
S4	1-692-271-31 s	SWITCH, SLIDE
S5	1-692-271-31 s	SWITCH, SLIDE
S6	1-692-271-31 s	SWITCH, SLIDE

IF-542 BOARD(PCS-I500)

Ref. No. or Q'ty	Part No.	SP Description
1pc	3-179-084-01 s	LEVER (R), PC BOARD
1pc	7-621-259-55 s	SCREW +P 2.6X8
1pc	7-682-947-01 s	SCREW +PSW 3X6
C1	1-126-402-11 s	ELECT, CHIP 2.2uF 20% 50V
C2	1-126-401-11 s	ELECT, CHIP 1uF 20% 50V
C3	1-164-004-11 s	CERAMIC, CHIP 0.1uF 10% 25V
C4	1-164-004-11 s	CERAMIC, CHIP 0.1uF 10% 25V
C5	1-164-004-11 s	CERAMIC, CHIP 0.1uF 10% 25V
C6	1-164-004-11 s	CERAMIC, CHIP 0.1uF 10% 25V
C7	1-164-004-11 s	CERAMIC, CHIP 0.1uF 10% 25V
C8	1-164-004-11 s	CERAMIC, CHIP 0.1uF 10% 25V
C104	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C111	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C112	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C117	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C118	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C119	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C120	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C122	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C123	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C125	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C126	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C127	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C128	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C129	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C130	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C131	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C132	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C133	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C134	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C135	1-163-021-91 s	CERAMIC 0.01uF 10% 50V
C201	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C202	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C203	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C204	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C205	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C206	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C207	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C208	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C209	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C210	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C211	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C212	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C213	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C214	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C215	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C216	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C217	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C218	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C219	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C220	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C221	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C222	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C223	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C224	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C225	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C226	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V
C227	1-126-394-11 s	ELECT, CHIP 10uF 20% 16V

(IF-542 BOARD(PCS-I500))

Ref. No. or Q'ty	Part No.	SP Description
C228	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C229	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C230	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C231	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C232	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C233	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C234	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C235	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C236	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C237	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C238	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C239	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C240	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C400	1-126-401-11	s ELECT, CHIP 1uF 20% 50V
C401	1-126-401-11	s ELECT, CHIP 1uF 20% 50V
C500	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C501	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
CN1	1-580-195-21	s CONNECTOR, PHEC 100P, FEMALE
CN2	1-774-777-21	s CONNECTOR, BB 40P, FEMALE
CN3	1-774-138-11	s CONNECTOR 36P, FEMALE
CN4	1-774-138-11	s CONNECTOR 36P, FEMALE
FB1	1-543-644-11	s BEAD, FERRITE (CHIP)
FB2	1-543-644-11	s BEAD, FERRITE (CHIP)
FB3	1-543-644-11	s BEAD, FERRITE (CHIP)
FB4	1-543-644-11	s BEAD, FERRITE (CHIP)
FB5	1-543-644-11	s BEAD, FERRITE (CHIP)
FB6	1-543-644-11	s BEAD, FERRITE (CHIP)
FB7	1-543-644-11	s BEAD, FERRITE (CHIP)
FB8	1-543-644-11	s BEAD, FERRITE (CHIP)
FB9	1-543-644-11	s BEAD, FERRITE (CHIP)
FB10	1-543-644-11	s BEAD, FERRITE (CHIP)
FB11	1-543-644-11	s BEAD, FERRITE (CHIP)
FB12	1-543-644-11	s BEAD, FERRITE (CHIP)
FB13	1-543-644-11	s BEAD, FERRITE (CHIP)
FB14	1-543-644-11	s BEAD, FERRITE (CHIP)
FB15	1-543-644-11	s BEAD, FERRITE (CHIP)
FB16	1-543-644-11	s BEAD, FERRITE (CHIP)
FB17	1-543-644-11	s BEAD, FERRITE (CHIP)
FB18	1-543-644-11	s BEAD, FERRITE (CHIP)
FB19	1-543-644-11	s BEAD, FERRITE (CHIP)
FB20	1-543-644-11	s BEAD, FERRITE (CHIP)
FB21	1-543-644-11	s BEAD, FERRITE (CHIP)
FB22	1-543-644-11	s BEAD, FERRITE (CHIP)
FB23	1-543-644-11	s BEAD, FERRITE (CHIP)
FB24	1-543-644-11	s BEAD, FERRITE (CHIP)
FB25	1-543-644-11	s BEAD, FERRITE (CHIP)
FB26	1-543-644-11	s BEAD, FERRITE (CHIP)
FB27	1-543-644-11	s BEAD, FERRITE (CHIP)
FB28	1-543-644-11	s BEAD, FERRITE (CHIP)
FB29	1-543-644-11	s BEAD, FERRITE (CHIP)
FB30	1-543-644-11	s BEAD, FERRITE (CHIP)
FB31	1-543-644-11	s BEAD, FERRITE (CHIP)
FB32	1-543-644-11	s BEAD, FERRITE (CHIP)
FB33	1-543-644-11	s BEAD, FERRITE (CHIP)
FB34	1-543-644-11	s BEAD, FERRITE (CHIP)
FB35	1-543-644-11	s BEAD, FERRITE (CHIP)
FB36	1-543-644-11	s BEAD, FERRITE (CHIP)
FB37	1-543-644-11	s BEAD, FERRITE (CHIP)

(IF-542 BOARD(PCS-I500))

Ref. No. or Q'ty	Part No.	SP Description
FB38	1-543-644-11	s BEAD, FERRITE (CHIP)
FB39	1-543-644-11	s BEAD, FERRITE (CHIP)
FB40	1-543-644-11	s BEAD, FERRITE (CHIP)
FB41	1-543-644-11	s BEAD, FERRITE (CHIP)
FB42	1-543-644-11	s BEAD, FERRITE (CHIP)
FB43	1-543-644-11	s BEAD, FERRITE (CHIP)
FB44	1-543-644-11	s BEAD, FERRITE (CHIP)
FB45	1-543-644-11	s BEAD, FERRITE (CHIP)
FB46	1-543-644-11	s BEAD, FERRITE (CHIP)
FB47	1-543-644-11	s BEAD, FERRITE (CHIP)
FB48	1-543-644-11	s BEAD, FERRITE (CHIP)
IC1	8-759-822-95	s IC L79M05T-FA
IC2	8-759-538-46	s IC XR-T3590ID-TR
IC3	8-759-538-46	s IC XR-T3590ID-TR
IC4	8-759-927-12	s IC SN74HCT244ANS-E05
IC7	8-759-252-59	s IC MAX202CSE
IC8	8-759-252-59	s IC MAX202CSE
IC9	8-759-252-59	s IC MAX202CSE
IC10	8-759-252-59	s IC MAX202CSE
IC11	8-759-926-67	s IC SN74HC374ANS-E05
IC12	8-759-926-48	s IC SN74HC244NS
IC13	8-759-252-59	s IC MAX202CSE
IC14	8-759-252-59	s IC MAX202CSE
IC15	8-759-252-59	s IC MAX202CSE
IC16	8-759-252-59	s IC MAX202CSE
IC17	8-759-926-67	s IC SN74HC374ANS-E05
IC18	8-759-926-48	s IC SN74HC244NS
IC19	8-759-545-12	s IC TC74ACT244F(EL)
IC20	8-759-545-12	s IC TC74ACT244F(EL)
IC21	8-759-927-15	s IC SN74HCT245NS
IC22	8-759-926-12	s IC SN74HC139ANS
IC23	8-759-926-12	s IC SN74HC139ANS
IC24	8-759-926-48	s IC SN74HC244NS
IC25	8-759-925-90	s IC SN74HC74ANS
IC26	8-759-925-90	s IC SN74HC74ANS
IC27	8-759-925-85	s IC SN74HC32ANS
IC28	8-759-925-85	s IC SN74HC32ANS
IC29	8-759-925-85	s IC SN74HC32ANS
IC30	8-759-925-74	s IC TC74HC04ANS
IC31	8-759-925-80	s IC SN74HC14ANS
IC32	8-759-925-80	s IC SN74HC14ANS
IC33	8-759-926-12	s IC SN74HC139ANS
IC34	8-759-925-90	s IC SN74HC74ANS
IC35	8-759-926-48	s IC SN74HC244NS
JC1	1-216-295-91	s METAL, CHIP 0
JC2	1-216-295-91	s METAL, CHIP 0
JC3	1-216-295-91	s METAL, CHIP 0
JC4	1-216-295-91	s METAL, CHIP 0
JC5	1-216-295-91	s METAL, CHIP 0
JC6	1-216-295-91	s METAL, CHIP 0
Q1	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
R1	1-208-760-11	s METAL, CHIP 120 0.5% 1/10W
R2	1-208-760-11	s METAL, CHIP 120 0.5% 1/10W
R3	1-208-760-11	s METAL, CHIP 120 0.5% 1/10W
R10	1-208-760-11	s METAL, CHIP 120 0.5% 1/10W
R11	1-208-760-11	s METAL, CHIP 120 0.5% 1/10W

32 (PCS-5100/5100P-J, E)

(IF-542 BOARD(PCS-I500))

Ref. No. or Q'ty	Part No.	SP Description
R16	1-208-760-11	s METAL, CHIP 120 0.5% 1/10W
R17	1-208-760-11	s METAL, CHIP 120 0.5% 1/10W
R18	1-208-760-11	s METAL, CHIP 120 0.5% 1/10W
R25	1-208-760-11	s METAL, CHIP 120 0.5% 1/10W
R26	1-208-760-11	s METAL, CHIP 120 0.5% 1/10W
R51	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R52	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R53	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R54	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R55	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R56	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R57	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R58	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R59	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R60	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R61	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R62	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R63	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R64	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R65	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R66	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R67	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R68	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R69	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R70	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R71	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R72	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R73	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R74	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R75	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R76	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R77	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R78	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R79	1-216-101-00	s METAL, CHIP 150K 5% 1/10W
R80	1-216-101-00	s METAL, CHIP 150K 5% 1/10W
R81	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R82	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R83	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R84	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R85	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
RB1	1-239-309-11	s RESISTOR BLOCK, CHIP 100Kx8

IF-543 BOARD(PCS-I520)

Ref. No. or Q'ty	Part No.	SP Description
1pc	3-179-084-01	s LEVER (R), PC BOARD
1pc	7-682-947-01	s SCREW +PSW 3X6
C101	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C102	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C103	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C104	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C105	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C106	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C107	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C108	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C109	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C110	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C111	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C112	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C113	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C114	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C115	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C116	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C117	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C118	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C119	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C120	1-163-021-91	s CERAMIC 0.01uF 10% 50V
C200	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C201	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
CN1	1-580-195-21	s CONNECTOR, PHEC 100P, FEMALE
CN2	1-774-777-21	s CONNECTOR, BB 40P, FEMALE
CN3	1-766-193-11	o CONNECTOR, D-SUB 25P, FEMALE
FB1	1-543-644-11	s BEAD, FERRITE (CHIP)
FB2	1-543-644-11	s BEAD, FERRITE (CHIP)
FB3	1-543-644-11	s BEAD, FERRITE (CHIP)
FB4	1-543-644-11	s BEAD, FERRITE (CHIP)
FB5	1-543-644-11	s BEAD, FERRITE (CHIP)
FB6	1-543-644-11	s BEAD, FERRITE (CHIP)
FB7	1-543-644-11	s BEAD, FERRITE (CHIP)
FB8	1-543-644-11	s BEAD, FERRITE (CHIP)
FB9	1-543-644-11	s BEAD, FERRITE (CHIP)
FB10	1-543-644-11	s BEAD, FERRITE (CHIP)
FB11	1-543-644-11	s BEAD, FERRITE (CHIP)
FB12	1-543-644-11	s BEAD, FERRITE (CHIP)
FB13	1-543-644-11	s BEAD, FERRITE (CHIP)
FB14	1-543-644-11	s BEAD, FERRITE (CHIP)
FB15	1-543-644-11	s BEAD, FERRITE (CHIP)
FB16	1-543-644-11	s BEAD, FERRITE (CHIP)
FB17	1-543-644-11	s BEAD, FERRITE (CHIP)
FB18	1-543-644-11	s BEAD, FERRITE (CHIP)
FB19	1-543-644-11	s BEAD, FERRITE (CHIP)
FB20	1-543-644-11	s BEAD, FERRITE (CHIP)
FB21	1-543-644-11	s BEAD, FERRITE (CHIP)
IC1	8-759-476-78	s IC MC3486NS
IC2	8-759-476-78	s IC MC3486NS
IC3	8-759-476-79	s IC MC3487NS
IC4	8-759-545-12	s IC TC74ACT244F(EL)
IC5	8-759-545-12	s IC TC74ACT244F(EL)
IC6	8-759-927-15	s IC SN74HCT245NS
IC7	8-759-926-11	s IC SN74HC138ANS
IC8	8-759-926-48	s IC SN74HC244NS
IC9	8-759-925-90	s IC SN74HC74ANS

(IF-543 BOARD(PCS-I520))

Ref. No. or Q'ty	Part No.	SP Description
IC10	8-759-926-12	s IC SN74HC139ANS
IC11	8-759-925-85	s IC SN74HC32ANS
IC12	8-759-925-85	s IC SN74HC32ANS
IC13	8-759-925-74	s IC TC74HC04ANS
IC14	8-759-927-12	s IC SN74HCT244ANS-E05
IC15	8-759-927-12	s IC SN74HCT244ANS-E05
IC16	8-759-926-67	s IC SN74HC374ANS-E05
IC17	8-759-926-18	s IC SN74HC157ANS
IC18	8-759-926-18	s IC SN74HC157ANS
IC19	8-759-925-90	s IC SN74HC74ANS
IC20	8-759-926-48	s IC SN74HC244NS
R1	1-216-101-00	s METAL, CHIP 150K 5% 1/10W
R2	1-216-101-00	s METAL, CHIP 150K 5% 1/10W
R3	1-216-101-00	s METAL, CHIP 150K 5% 1/10W
R4	1-216-101-00	s METAL, CHIP 150K 5% 1/10W
R5	1-216-101-00	s METAL, CHIP 150K 5% 1/10W
R6	1-216-101-00	s METAL, CHIP 150K 5% 1/10W
R7	1-216-101-00	s METAL, CHIP 150K 5% 1/10W
R8	1-216-101-00	s METAL, CHIP 150K 5% 1/10W
R9	1-216-101-00	s METAL, CHIP 150K 5% 1/10W
R10	1-216-101-00	s METAL, CHIP 150K 5% 1/10W
R11	1-216-101-00	s METAL, CHIP 150K 5% 1/10W
R12	1-216-101-00	s METAL, CHIP 150K 5% 1/10W
R13	1-216-101-00	s METAL, CHIP 150K 5% 1/10W
R14	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R15	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R16	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R17	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R18	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R19	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R20	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R21	1-216-089-91	s METAL, CHIP 47k 5% 1/10W
R22	1-216-089-91	s METAL, CHIP 47k 5% 1/10W
R23	1-216-089-91	s METAL, CHIP 47k 5% 1/10W
R24	1-216-089-91	s METAL, CHIP 47k 5% 1/10W
R25	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R26	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R27	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R28	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R29	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R30	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R31	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R32	1-216-097-91	s METAL, CHIP 100K 5% 1/10W

IF-583A BOARD(PCS-P500/P500P)

Ref. No. or Q'ty	Part No.	SP Description
1pc	A-8319-550-A	o MOUNTED CIRCUIT BOARD, IF-583A
2pcs	8-759-460-61	s IC PALCE16V8H-15SC/4
C001	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C002	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C005	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C006	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C007	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C008	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C009	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C010	1-162-919-11	s CERAMIC, CHIP 22PF 5% 50V
C011	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C012	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C013	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C014	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C015	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C016	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C017	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C018	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C019	1-126-394-11	s ELECT, CHIP 10uF 20% 16V
C022	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C200	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C201	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C202	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C203	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C204	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C206	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C207	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C208	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C209	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C210	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C211	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C212	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C213	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C214	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C215	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C216	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C217	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C218	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C219	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C225	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C226	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C227	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C228	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C229	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C250	1-135-177-21	s TANTALUM, CHIP 1uF 10% 25V
C251	1-135-177-21	s TANTALUM, CHIP 1uF 10% 25V
C252	1-135-177-21	s TANTALUM, CHIP 1uF 10% 25V
C253	1-135-177-21	s TANTALUM, CHIP 1uF 10% 25V
C254	1-113-500-11	s TANTALUM, CHIP 100uF 20% 10V
C255	1-113-500-11	s TANTALUM, CHIP 100uF 20% 10V
CN101	1-695-186-21	o CONNECTOR, DIN 60P, FEMALE
CNI204	1-540-151-21	s SOCKET, IC 32P
IC001	8-759-927-15	s IC SN74HCT245NS
IC002	8-759-926-69	s IC SN74HC377ANS
IC005	8-759-927-12	s IC SN74HCT244ANS-E05
IC006	8-759-374-17	s IC UPD65646GJ-171-3EB
IC007	8-759-980-27	s IC SN74ALS163BNS-E05

34 (PCS-5100/5100P-J, E)

(IF-583A BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
IC008	8-759-559-54	o IC PALCE16V8H-15SC/4/T-RAP11V1
IC022	8-759-559-53	o IC PALCE16V8H-15SC/4/T-RAP10V1
IC200	8-759-561-83	s IC XC56303PV80
IC201	8-759-482-20	s IC IDT71V124S15Y-TL
IC202	8-759-482-20	s IC IDT71V124S15Y-TL
IC203	8-759-482-20	s IC IDT71V124S15Y-TL
IC204	8-759-562-72	o IC AT29LV512-15JI-IMXV3.0
IC250	8-759-426-95	s IC L88MS33T-TL
IC251	8-759-426-95	s IC L88MS33T-TL
JC202	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC203	1-216-864-11	s METAL, CHIP 0 5% 1/16W
R001	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R002	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R003	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R004	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R005	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R006	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R007	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R008	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R009	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R010	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R011	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R012	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R013	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R014	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R015	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R016	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R017	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R020	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R022	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R200	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R201	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R202	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R203	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R204	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R205	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R206	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R207	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R208	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R209	1-216-837-11	s METAL, CHIP 22K 5% 1/16W
R212	1-216-801-11	s METAL, CHIP 22 5% 1/16W
RB001	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB002	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB200	1-239-286-11	s RESISTOR BLOCK, CHIP 22Kx4
RB201	1-239-286-11	s RESISTOR BLOCK, CHIP 22Kx4
RB202	1-239-286-11	s RESISTOR BLOCK, CHIP 22Kx4
RB203	1-239-286-11	s RESISTOR BLOCK, CHIP 22Kx4
RB204	1-239-286-11	s RESISTOR BLOCK, CHIP 22Kx4
RB205	1-239-286-11	s RESISTOR BLOCK, CHIP 22Kx4
RB206	1-239-286-11	s RESISTOR BLOCK, CHIP 22Kx4
RB207	1-239-286-11	s RESISTOR BLOCK, CHIP 22Kx4
X001	1-760-557-11	o CRYSTAL 12.288MHz

VPR-019B BOARD(PCS-P500/P500P)

Ref. No. or Q'ty	Part No.	SP Description
1pc	A-8319-584-A	o MOUNTED CIRCUIT BOARD, VPR-019B
1pc	3-179-084-01	s LEVER (R), PC BOARD
1pc	7-621-259-55	s SCREW +P 2.6X8
1pc	7-682-947-01	s SCREW +PSW 3X6
1pc	8-759-460-61	s IC PALCE16V8H-15SC/4
C001	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C003	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C004	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C005	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C006	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C007	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C022	1-162-962-11	s CERAMIC, CHIP 470PF 10% 50V
C040	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C041	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C051	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C100	1-126-396-11	s ELECT, CHIP 47uF 20% 16V
C101	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C102	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C103	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C104	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C105	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C106	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C107	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C108	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C111	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C112	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C113	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C114	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C115	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C116	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C117	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C118	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C119	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C120	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C121	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C122	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C123	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C124	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C125	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C126	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C127	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C128	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C129	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C131	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C132	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C133	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C134	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C135	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C136	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C137	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C141	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C142	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C143	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C144	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C145	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C146	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C147	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C148	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V
C149	1-164-156-11	s CERAMIC, CHIP 0.1uF 25V

(VPR-019B BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
C151	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C152	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C153	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C154	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C155	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C156	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C157	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C158	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C159	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C160	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C161	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C163	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C164	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C165	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C166	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C167	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C171	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C173	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C174	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C175	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C201	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C202	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C203	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C204	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C221	1-162-919-11 s	CERAMIC, CHIP 22PF 5% 50V
C222	1-162-919-11 s	CERAMIC, CHIP 22PF 5% 50V
C223	1-162-921-11 s	CERAMIC, CHIP 33PF 5% 50V
C224	1-162-921-11 s	CERAMIC, CHIP 33PF 5% 50V
C251	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C252	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C253	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C254	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C255	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C256	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C257	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C301	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C303	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C304	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C305	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C306	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C307	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C308	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C309	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C310	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C311	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C312	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C350	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C351	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C352	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C353	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C354	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C355	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C356	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C357	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C358	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C359	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C360	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C361	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C362	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V

(VPR-019B BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
C363	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C364	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C365	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C366	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C367	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C368	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C369	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C401	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C403	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C404	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C405	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C406	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C407	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C408	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C409	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C450	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C451	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C452	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C453	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C454	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C455	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C456	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C457	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C458	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C459	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C460	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C461	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C462	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C463	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C464	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C465	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C466	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C467	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C468	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C469	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C501	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C552	1-164-156-11 s	CERAMIC, CHIP 0.1uF 25V
C553	1-126-398-11 s	ELECT, CHIP 4.7uF 20% 35V
C554	1-126-398-11 s	ELECT, CHIP 4.7uF 20% 35V
CN041	1-750-832-21 o	CONNECTOR, BB 120P, FEMALE
CN042	1-750-832-21 o	CONNECTOR, BB 120P, FEMALE
CN101	1-691-551-11 o	CONNECTOR (SMD) 8P, MALE
CN201	1-565-276-21 s	JACK, MINI STEREO
CN202	1-565-276-21 s	JACK, MINI STEREO
CN501	1-770-230-11 o	CONNECTOR, BB 50P, FEMALE
D201	8-719-104-34 s	DIODE 1S2835
D202	8-719-801-78 s	DIODE 1S2837-T1
D203	8-719-104-34 s	DIODE 1S2835
D501	8-719-104-34 s	DIODE 1S2835
D502	8-719-056-17 s	DIODE RD6.2MW-T1B
D503	8-719-056-17 s	DIODE RD6.2MW-T1B
D504	8-719-056-17 s	DIODE RD6.2MW-T1B
D505	8-719-056-17 s	DIODE RD6.2MW-T1B
D506	8-719-056-17 s	DIODE RD6.2MW-T1B
D507	8-719-056-17 s	DIODE RD6.2MW-T1B
D508	8-719-056-17 s	DIODE RD6.2MW-T1B
D509	8-719-056-17 s	DIODE RD6.2MW-T1B
D510	8-719-056-17 s	DIODE RD6.2MW-T1B

36 (PCS-5100/5100P-J, E)

(VPR-019B BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
E001	1-535-757-11	s CHIP, CHECKER
E002	1-535-757-11	s CHIP, CHECKER
E003	1-535-757-11	s CHIP, CHECKER
E004	1-535-757-11	s CHIP, CHECKER
E005	1-535-757-11	s CHIP, CHECKER
E006	1-535-757-11	s CHIP, CHECKER
FL201	1-239-825-31	s FILTER, CHIP EMI
FL202	1-239-825-31	s FILTER, CHIP EMI
FL203	1-239-825-31	s FILTER, CHIP EMI
FL204	1-239-825-31	s FILTER, CHIP EMI
FL501	1-239-825-31	s FILTER, CHIP EMI
FL502	1-239-825-31	s FILTER, CHIP EMI
FL503	1-239-825-31	s FILTER, CHIP EMI
FL504	1-239-825-31	s FILTER, CHIP EMI
FL505	1-239-825-31	s FILTER, CHIP EMI
FL506	1-239-825-31	s FILTER, CHIP EMI
FL507	1-239-825-31	s FILTER, CHIP EMI
FL508	1-239-825-31	s FILTER, CHIP EMI
FL509	1-239-825-31	s FILTER, CHIP EMI
FL510	1-239-825-31	s FILTER, CHIP EMI
FL511	1-239-825-31	s FILTER, CHIP EMI
FL512	1-239-825-31	s FILTER, CHIP EMI
FL513	1-239-825-31	s FILTER, CHIP EMI
FL514	1-239-825-31	s FILTER, CHIP EMI
FL515	1-239-825-31	s FILTER, CHIP EMI
FL516	1-239-825-31	s FILTER, CHIP EMI
FL517	1-239-825-31	s FILTER, CHIP EMI
FL518	1-239-825-31	s FILTER, CHIP EMI
FL519	1-239-825-31	s FILTER, CHIP EMI
IC1	8-759-553-99	s IC ISPLSI2032-80LT44-RAP08V1
IC003	8-759-186-02	s IC TC74VHCT245F(EL)
IC004	8-759-186-02	s IC TC74VHCT245F(EL)
IC005	8-759-451-89	s IC IDT74FCT157ATQ-TL
IC006	8-759-272-21	s IC TC74VHCT541F(EL)
IC007	8-759-269-09	s IC SN74HCT04ANS-E05
IC008	8-759-524-25	o IC TC7WH241FU(Te12R)
IC009	8-759-525-11	s IC TC7SET32F(Te85L)
IC101	8-759-186-44	s IC TC74VHC125F(EL)
IC102	8-759-186-44	s IC TC74VHC125F(EL)
IC103	8-759-186-44	s IC TC74VHC125F(EL)
IC104	8-759-186-51	s IC TC74VHC157F(EL)
IC105	8-759-186-57	s IC TC74VHC175F(EL)
IC106	8-759-186-51	s IC TC74VHC157F(EL)
IC107	8-759-540-69	s IC UPD65621GB-Y12-9EU
IC108	8-759-540-69	s IC UPD65621GB-Y12-9EU
IC111	8-759-395-39	s IC LF2242QC-33
IC112	8-759-540-68	s IC UPD65646GB-Y16-9EU
IC113	8-759-540-68	s IC UPD65646GB-Y16-9EU
IC114	8-759-179-94	s IC HM530281RTT-20
IC115	8-759-179-94	s IC HM530281RTT-20
IC116	8-759-557-01	s IC ISPLSI1032E-70LT-RAP01V1
IC117	8-759-540-68	s IC UPD65646GB-Y16-9EU
IC118	8-759-540-67	s IC UPD65804GC-095-7EA
IC119	8-759-167-20	s IC UPD42280GU-30-E2
IC120	8-759-167-20	s IC UPD42280GU-30-E2
IC121	8-759-540-68	s IC UPD65646GB-Y16-9EU
IC122	8-759-540-69	s IC UPD65621GB-Y12-9EU
IC123	8-759-175-29	s IC TC74VHC374F(EL)

(VPR-019B BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
IC124	8-759-186-51	s IC TC74VHC157F(EL)
IC125	8-759-081-44	s IC TC74VHC04F(EL)
IC131	8-759-925-90	s IC SN74HC74ANS
IC132	8-759-186-57	s IC TC74VHC175F(EL)
IC133	8-759-174-16	s IC TC74VHC244F(EL)
IC134	8-759-174-16	s IC TC74VHC244F(EL)
IC135	8-759-925-90	s IC SN74HC74ANS
IC136	8-759-186-57	s IC TC74VHC175F(EL)
IC137	8-759-269-09	s IC SN74HCT04ANS-E05
IC146	8-759-081-44	s IC TC74VHC04F(EL)
IC147	8-759-557-00	s IC ISPLSI2032-80LT44-RAP09V1
IC151	8-759-186-44	s IC TC74VHC125F(EL)
IC152	8-759-186-51	s IC TC74VHC157F(EL)
IC153	8-759-565-46	s IC ISPLSI1032E-70LT-RAP02V2
IC154	8-759-540-69	s IC UPD65621GB-Y12-9EU
IC155	8-759-179-94	s IC HM530281RTT-20
IC156	8-759-179-94	s IC HM530281RTT-20
IC157	8-759-179-94	s IC HM530281RTT-20
IC158	8-759-179-94	s IC HM530281RTT-20
IC159	8-759-540-68	s IC UPD65646GB-Y16-9EU
IC160	8-759-540-68	s IC UPD65646GB-Y16-9EU
IC161	8-759-557-04	s IC PALCE16V8H-15SC/4/T-RAP09V1
IC171	8-759-099-38	s IC SN74HCT374ANS-E05
IC173	8-759-540-69	s IC UPD65621GB-Y12-9EU
IC174	8-759-540-69	s IC UPD65621GB-Y12-9EU
IC175	8-759-540-69	s IC UPD65621GB-Y12-9EU
IC201	8-759-374-17	s IC UPD65646GJ-171-3EB
IC202	8-759-374-19	s IC UPD17216GT-560
IC203	8-759-269-09	s IC SN74HCT04ANS-E05
IC204	8-759-185-61	s IC TC74VHCT00F(EL)
IC301	8-759-543-07	s IC 8X83105AKAB
IC303	8-759-540-94	s IC IDT71024S12Y-TL
IC304	8-759-540-94	s IC IDT71024S12Y-TL
IC305	8-759-540-94	s IC IDT71024S12Y-TL
IC306	8-759-540-94	s IC IDT71024S12Y-TL
IC307	8-759-538-54	s IC KM416C1200CT-6T
IC308	8-759-538-54	s IC KM416C1200CT-6T
IC309	8-759-541-40	s IC IDT71256SA12Y-TL
IC310	8-759-541-40	s IC IDT71256SA12Y-TL
IC311	8-759-541-40	s IC IDT71256SA12Y-TL
IC312	8-759-541-40	s IC IDT71256SA12Y-TL
IC401	8-759-468-11	s IC 8X83404AKAB
IC403	8-759-436-45	s IC IDT71024S15Y-TL
IC404	8-759-436-45	s IC IDT71024S15Y-TL
IC405	8-759-436-45	s IC IDT71024S15Y-TL
IC406	8-759-436-45	s IC IDT71024S15Y-TL
IC407	8-759-538-54	s IC KM416C1200CT-6T
IC408	8-759-538-54	s IC KM416C1200CT-6T
IC409	8-759-447-77	s IC TC7WH74FU(Te12R)
IC501	8-759-368-65	s IC SYM53CF96-2
JC001	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC002	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC111	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC112	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC114	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC116	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC119	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC120	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC122	1-216-864-11	s METAL, CHIP 0 5% 1/16W

(VPR-019B BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
JC123	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC124	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC125	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC127	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC129	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC154	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC174	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC175	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC176	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC177	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC178	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC179	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC180	1-216-864-11	s METAL, CHIP 0 5% 1/16W
JC181	1-216-864-11	s METAL, CHIP 0 5% 1/16W
PS201	△ 1-218-233-11	s METAL, CHIP 47 5% 1/2W
PS501	△ 1-576-212-21	s FUSE, CHIP 1.25A 125V
R001	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R009	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R010	1-216-821-11	s METAL, CHIP 1K 5% 1/16W
R014	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R017	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R018	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R101	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R102	1-216-797-11	s METAL, CHIP 10 5% 1/16W
R103	1-216-793-11	s METAL, CHIP 4.7 5% 1/16W
R104	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R105	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R111	1-216-793-11	s METAL, CHIP 4.7 5% 1/16W
R112	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R114	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R116	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R117	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R131	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R132	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R133	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R134	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R135	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R136	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R137	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R138	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R139	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R140	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R141	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R142	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R143	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R144	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R145	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R146	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R147	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R148	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R150	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R152	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R161	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R162	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R171	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R172	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R173	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R174	1-216-805-11	s METAL, CHIP 47 5% 1/16W

(VPR-019B BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
R201	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R202	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R203	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R204	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R205	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R206	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R207	1-216-833-11	s METAL, CHIP 10K 5% 1/16W
R208	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R209	1-216-813-11	s METAL, CHIP 220 5% 1/16W
R211	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R212	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R213	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R214	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R215	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R216	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R217	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R218	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R303	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R304	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R306	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R307	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R309	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R310	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R311	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R312	1-216-841-11	s METAL, CHIP 47K 5% 1/16W
R313	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R314	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R403	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R404	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R406	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R407	1-216-801-11	s METAL, CHIP 22 5% 1/16W
R409	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R410	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R411	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R412	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R413	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R414	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R415	1-216-805-11	s METAL, CHIP 47 5% 1/16W
R501	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R502	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R503	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R504	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R505	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R506	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R507	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R508	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R509	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R510	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R511	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R512	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R513	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R514	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R515	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R516	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R517	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R518	1-216-033-00	s METAL, CHIP 220 5% 1/10W
R519	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R520	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R521	1-216-037-00	s METAL, CHIP 330 5% 1/10W

38 (PCS-5100/5100P-J, E)

(VPR-019B BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
R522	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R523	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R524	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R525	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R526	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R527	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R528	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R529	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R530	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R531	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R532	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R533	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R534	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R535	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R536	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R551	1-216-829-11	s METAL, CHIP 4.7K 5% 1/16W
R552	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R553	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
R554	1-216-845-11	s METAL, CHIP 100K 5% 1/16W
RB001	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB002	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB003	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB004	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB005	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB006	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB007	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB008	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB009	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB101	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB102	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB103	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB104	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB105	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB106	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB107	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB108	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB109	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB110	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB111	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB112	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB113	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB121	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB122	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB141	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB142	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB143	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB144	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB151	1-236-907-11	s RESISTOR BLOCK, CHIP 100Kx4
RB152	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB153	1-239-412-11	s RESISTOR BLOCK, CHIP 100x4
RB154	1-239-412-11	s RESISTOR BLOCK, CHIP 100x4
RB155	1-239-412-11	s RESISTOR BLOCK, CHIP 100x4
RB156	1-239-412-11	s RESISTOR BLOCK, CHIP 100x4
RB171	1-239-409-11	s RESISTOR BLOCK, CHIP 47x4
RB172	1-239-409-11	s RESISTOR BLOCK, CHIP 47x4
RB173	1-239-409-11	s RESISTOR BLOCK, CHIP 47x4
RB174	1-239-409-11	s RESISTOR BLOCK, CHIP 47x4
RB175	1-239-409-11	s RESISTOR BLOCK, CHIP 47x4
RB176	1-239-409-11	s RESISTOR BLOCK, CHIP 47x4

(VPR-019B BOARD(PCS-P500/P500P))

Ref. No. or Q'ty	Part No.	SP Description
RB177	1-239-409-11	s RESISTOR BLOCK, CHIP 47x4
RB178	1-239-409-11	s RESISTOR BLOCK, CHIP 47x4
RB201	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB202	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB301	1-239-621-11	s RESISTOR BLOCK, CHIP 22x4
RB302	1-239-621-11	s RESISTOR BLOCK, CHIP 22x4
RB303	1-239-621-11	s RESISTOR BLOCK, CHIP 22x4
RB304	1-239-621-11	s RESISTOR BLOCK, CHIP 22x4
RB401	1-239-621-11	s RESISTOR BLOCK, CHIP 22x4
RB402	1-239-621-11	s RESISTOR BLOCK, CHIP 22x4
RB403	1-239-621-11	s RESISTOR BLOCK, CHIP 22x4
RB404	1-239-621-11	s RESISTOR BLOCK, CHIP 22x4
RB501	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
RB502	1-236-908-11	s RESISTOR BLOCK, CHIP 10Kx4
X201	1-760-557-11	o CRYSTAL 12.288MHz
X202	1-579-477-21	s CRYSTAL 4.000MHz
X301	1-781-075-11	s CRYSTAL 36.000MHz
X401	1-760-967-21	s CRYSTAL 33.000MHz



SECTION 6
SCHEMATIC DIAGRAMS AND BOARD LAYOUTS

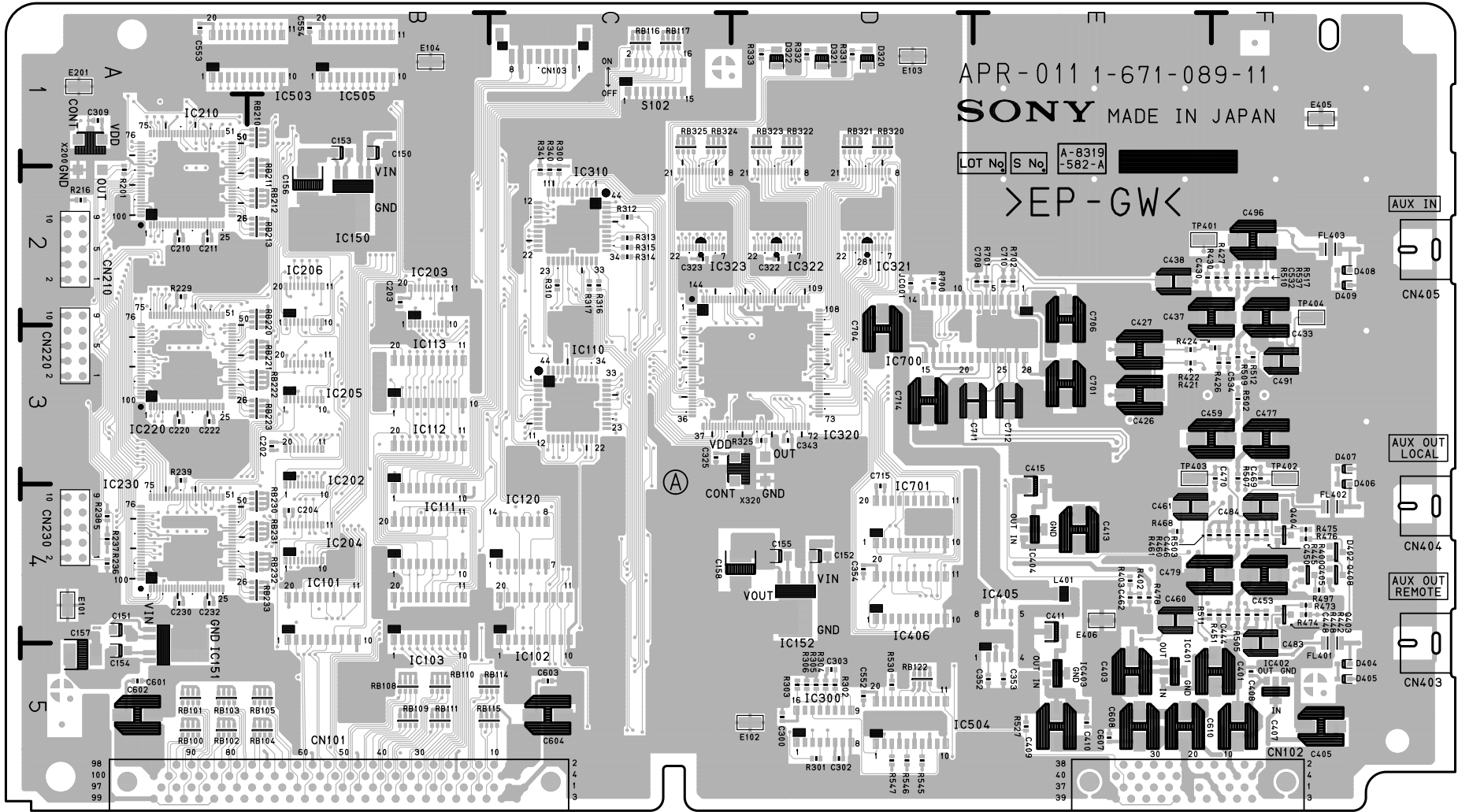
Board Name	Circuit Function	Page
A APR-011/011A	Audio Codec (G.711, G.722, G.728) Echo Cancel	6-2
C CN-1218	Connection	6-128
CPU-202	System Main Control (Memory, I/O, IC Card)	6-14
D DAD-017/017P	Video In/Out, A/D • D/A, Decode/Encode, Menu Generator	6-36
DAD-018/018P	Dual Monitor, U.V Decode, RGB→Y.U.V Convert	6-56
DAD-33/33P	Dual Monitor	6-142
I IF-540/540P	ISDN Interface	6-72
IF-541	X.21 Interface	6-90
IF-542	V.35 Interface	6-98
IF-543	RS-449 Interface	6-108
IF-583	Bonding Interface	6-136
L LED-246	Standby, Power Indicators	6-128
V VPR-019/019B	Video Codec (H.221, H.261, JPEG, MMR), Sircs Receive • Decode	6-116

In the schematic diagrams, the following marks are described near reference number.
These are parts data at factory.

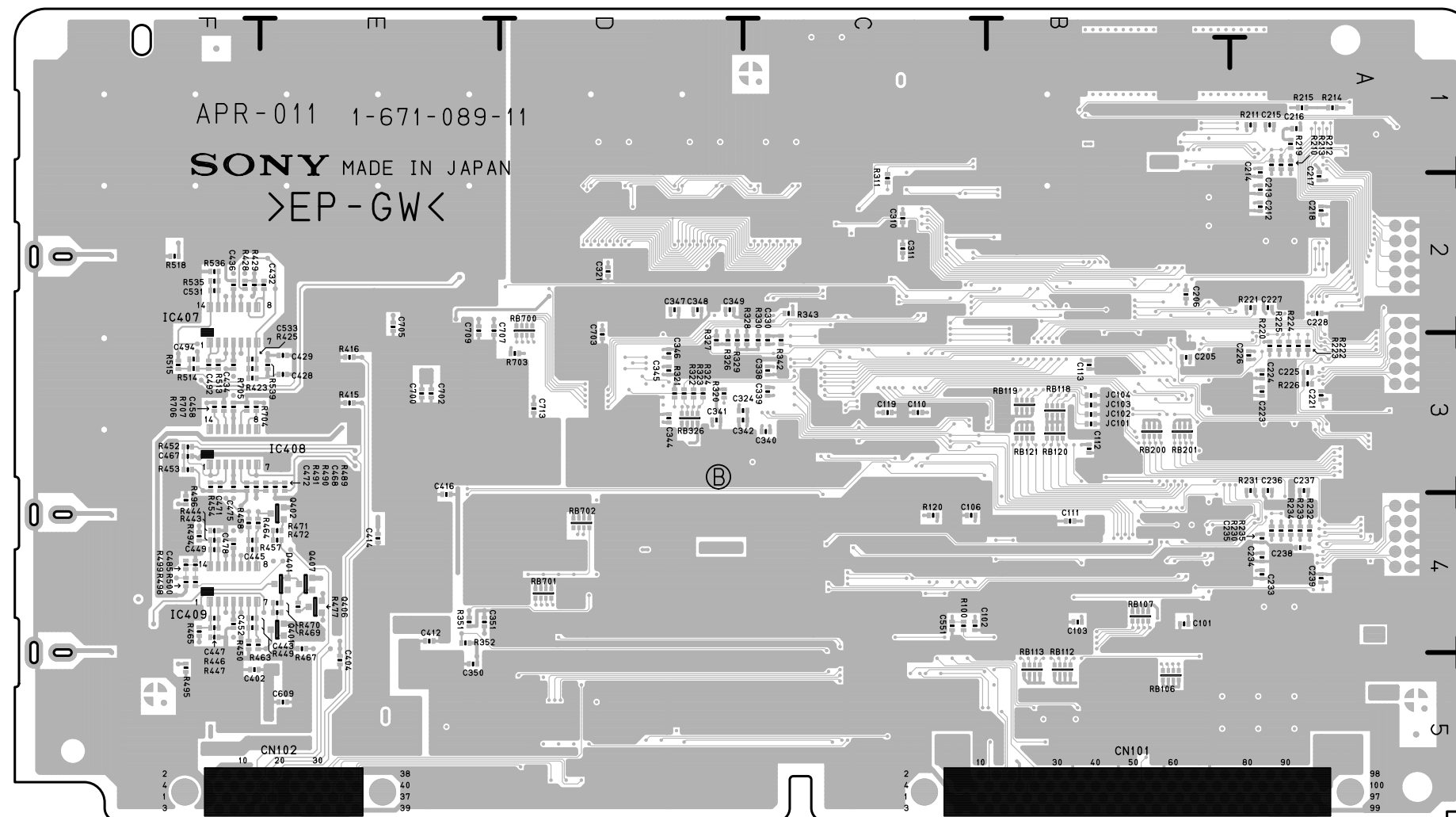
CAPACITOR (C)	RESISTOR (R)
	VARIABLE RESISTOR (RV)
AL — ELECTROLYTIC	RC — CARBON
AS —	RD —
TA — TANTALUM	RF — FUSE
CA — CERAMIC	RN — METAL
CC —	RS —
CCS —	RW — WIREWOUND
CM —	
CS —	
MPS — MYLAR	
PP —	
PS —	
PT —	
MD — DIPPED MICA	
MS — MICA	

The mentioned items in each waveform photograph of this section are the measurement point (location)
and measurement condition (the location indicates a point on the board).

PCS-P500 (J) : SN 63001 and higher
PCS-P500 (UC) : SN 23001 and higher
PCS-P500P (CE) : SN 53001 and higher



APR-011A -A SIDE-
SUFFIX: -11



APR-011A -B SIDE-
SUFFIX: -11

42 (PCS-5100/5100P-J, E)

APR-011A (1/4); AUDIO CODEC (G.711, G.722, G.728) ECHO CANCEL

PCS-P500 (J) ;	S/N 63001 and higher
PCS-P500 (UC) ;	S/N 23001 and higher
PCS-P500P (CE) ;	S/N 53001 and higher



6-4 (a) (PCS-P500/P500P SERVICE MANUAL Volume 2)

6-4 (a) (PCS-P500/P500P SERVICE MANUAL Volume 2)

A

B

C

D

E

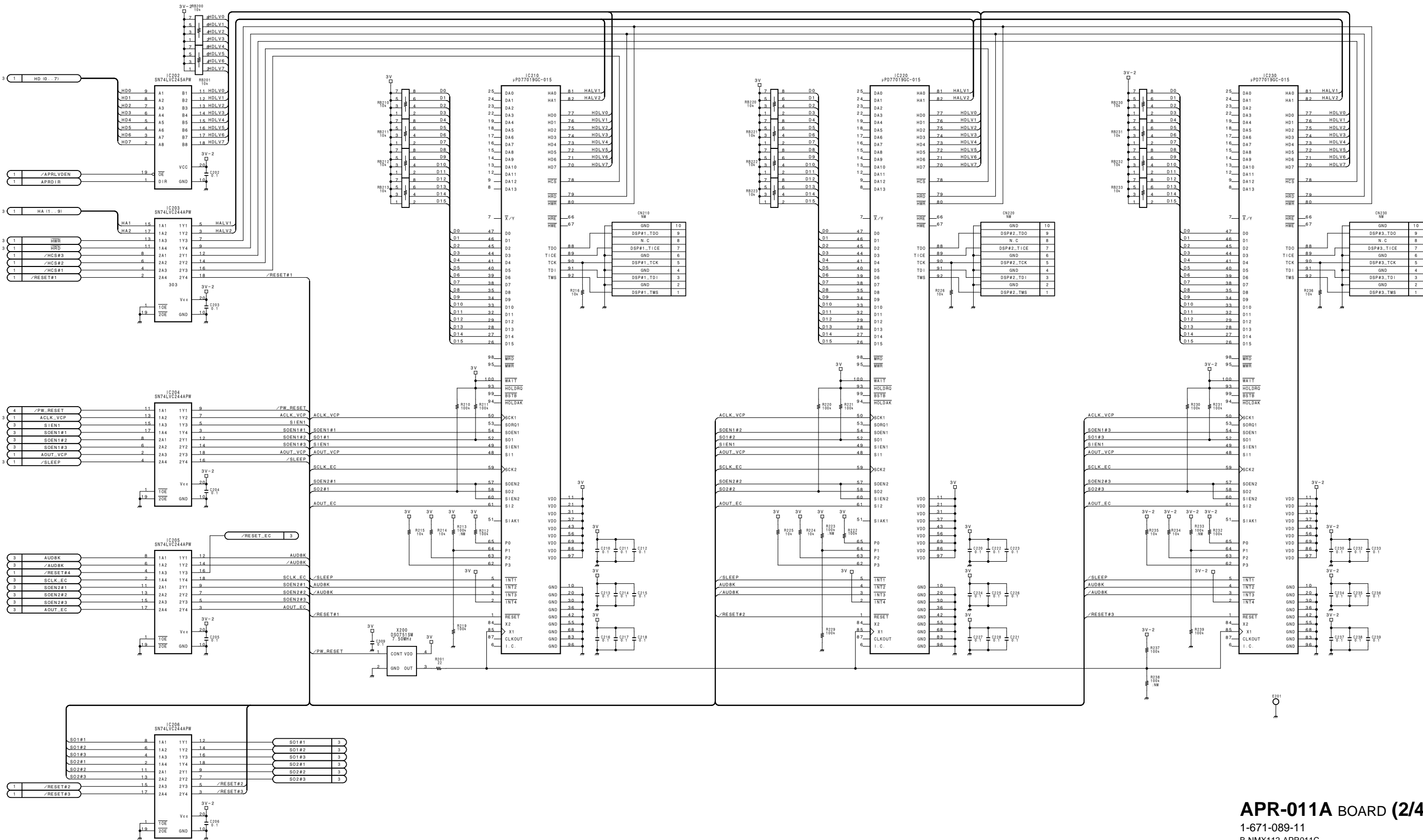
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C

1

APR-011A (2/4); AUDIO CODEC (G.711, G.722, G.728) ECHO CANCEL

PCS-P500 (J) ; S/N 63001 and higher
PCS-P500 (UC) ; S/N 23001 and higher
PCS-P500P (CE) ; S/N 53001 and higher



6-5 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-5 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

44 (PCS-5100/5100P-J, E)

APR-011A (3/4); AUDIO CODEC (G.711, G.722, G.728) ECHO CANCEL

PCS-P500 (J) ; S/N 63001 and higher
PCS-P500 (UC) ; S/N 23001 and higher
PCS-P500P (CE) ; S/N 53001 and higher

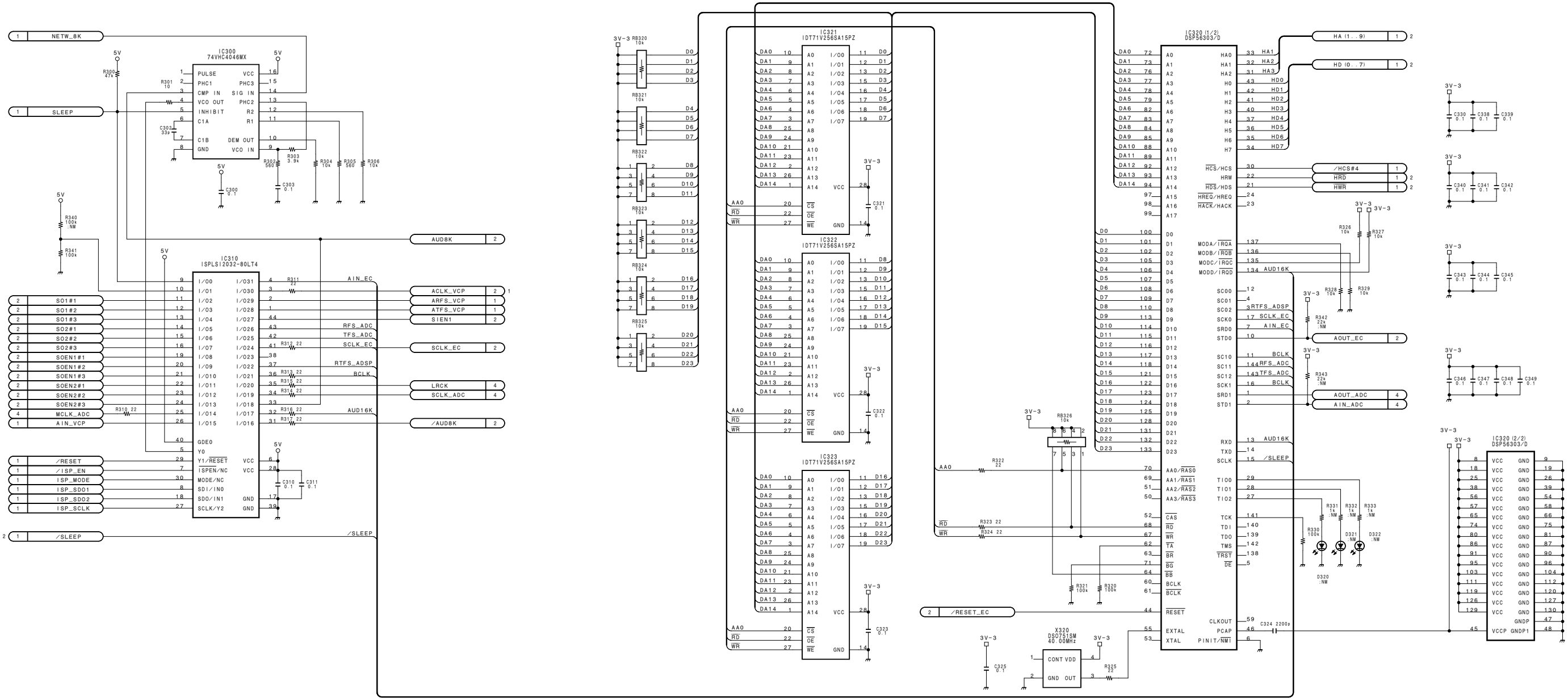
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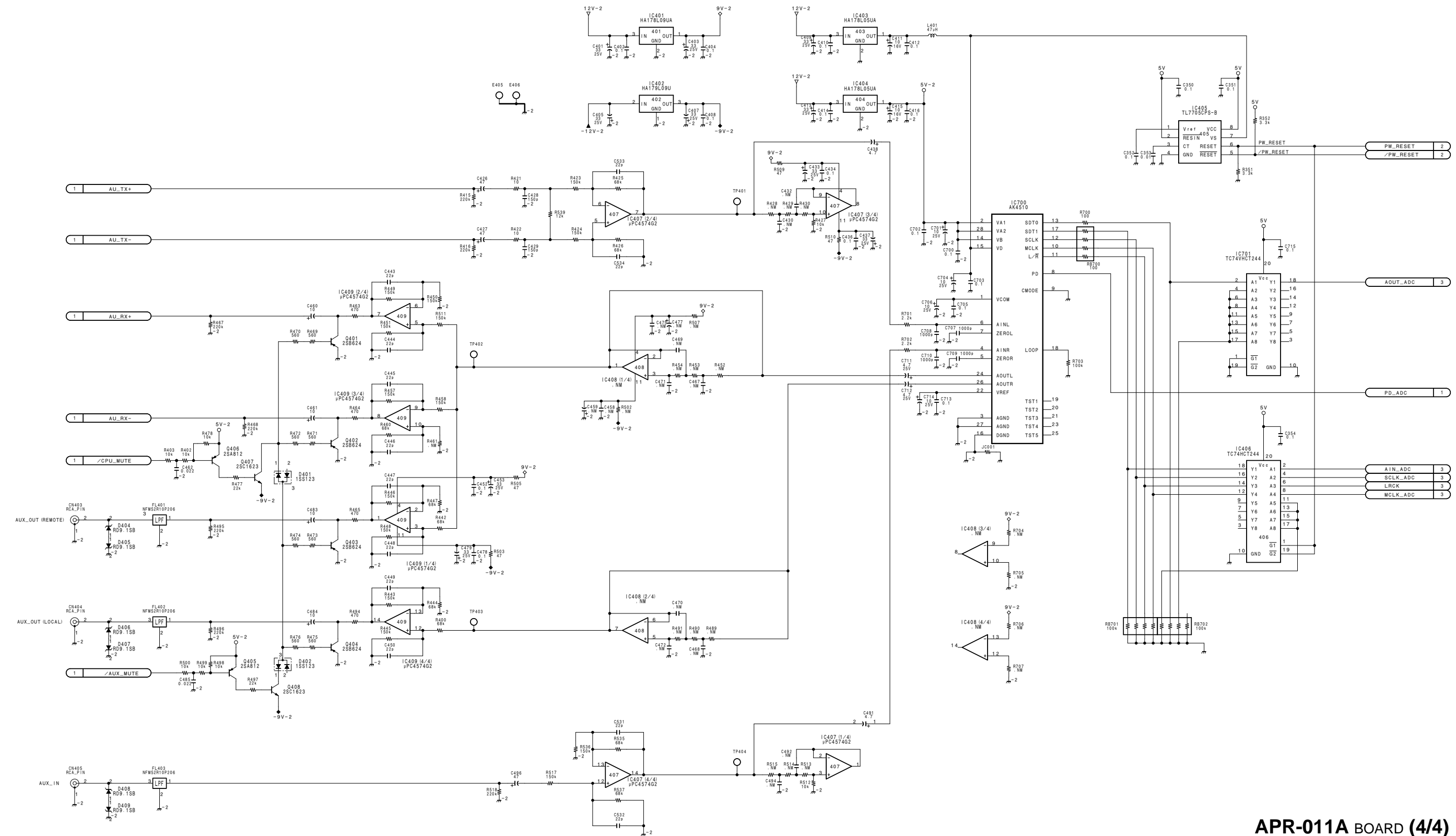
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5



APR-011A (4/4); AUDIO CODEC (G.711, G.722, G.728) ECHO CANCEL

PCS-P500 (J) ; S/N 63001 and higher
PCS-P500 (UC) ; S/N 23001 and higher
PCS-P500P (CE) ; S/N 53001 and higher



6-7 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-7 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

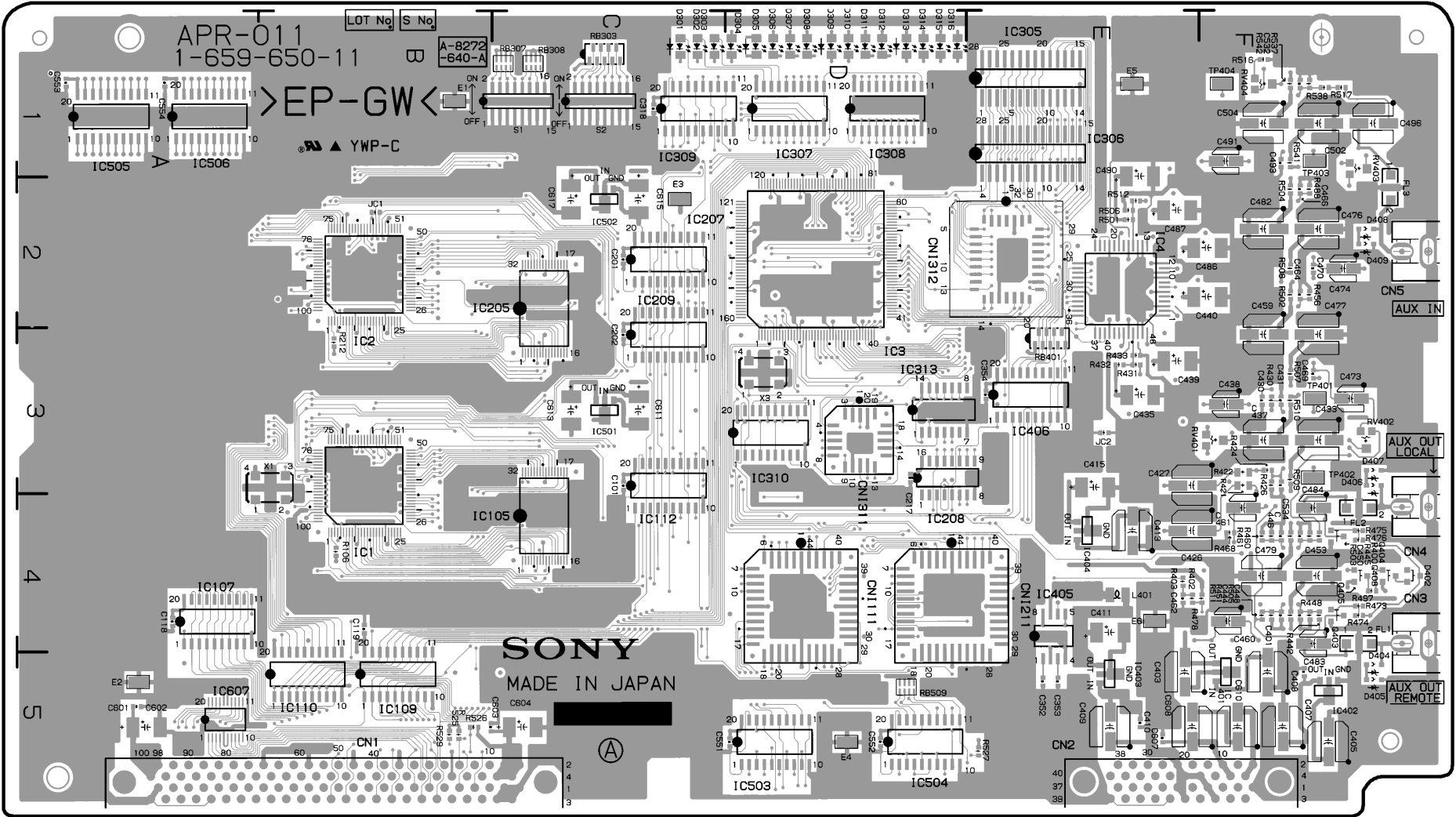
46 (PCS-5100/5100P-J, E)

APR-011 ; AUDIO CODEC (G.711, G.722, G.728) ECHO CANCEL

APR-011 (1-659-650-11)

*:B SDIE

CNI312	E-2	IC404	E-4	TP404	F-1
		IC405	E-4		
CN1	C-5	IC406	E-3	X1	B-3
CN2	F-5	IC407	*F-3	X3	D-3
CN3	F-4	IC408	*F-3		
CN4	F-4	IC409	*F-2		
CN5	F-2	IC410	*F-1		
		IC411	*F-4		
D301	C-1	IC501	C-3		
D302	C-1	IC502	C-2		
D303	C-1	IC503	D-5		
D304	D-1	IC504	D-5		
D305	D-1				
D306	D-1	L401	E-4		
D307	D-1				
D308	D-1	Q401	*F-4		
D309	D-1	Q402	*F-4		
D310	D-1	Q403	F-4		
D311	D-1	Q404	F-4		
D312	D-1	Q405	F-4		
D313	D-1	Q406	*F-4		
D314	D-1	Q407	*F-4		
D315	D-1	Q408	F-4		
D316	D-1	Q501	*C-3		
D401	*F-4	Q502	*C-2		
D402	F-4				
D404	F-5	RB101	*B-3		
D405	F-5	RB102	*B-4		
D406	F-3	RB103	*B-3		
D407	F-3	RB104	*B-4		
D408	F-2	RB201	*B-2		
D409	F-2	RB202	*B-2		
		RB203	*B-2		
E1	B-1	RB301	*D-2		
E2	A-5	RB302	*D-3		
E3	C-2	RB303	C-1		
E4	D-5	RB304	*D-1		
E5	E-1	RB305	*D-1		
E6	E-4	RB306	*D-1		
		RB307	C-1		
FL1	F-4	RB308	C-1		
FL2	F-4	RB309	*D-2		
FL3	F-2	RB401	E-3		
		RB402	*E-2		
IC3	D-2	RB501	*A-5		
IC4	E-2	RB502	*A-5		
IC105	C-4	RB503	*B-5		
IC107	A-4	RB504	*B-5		
IC109	B-5	RB505	*B-5		
IC110	B-5	RB506	*B-5		
IC112	C-3	RB507	*B-5		
IC205	C-2	RB508	*C-5		
IC207	C-2	RB509	D-5		
IC208	D-3				
IC209	C-3	RV401	F-3		
IC305	E-1	RV402	F-3		
IC306	E-1	RV403	F-1		
IC307	D-1	RV404	F-1		
IC308	D-1				
IC309	C-1	S1	C-1		
IC310	D-3	S2	C-1		
IC313	D-3				
IC401	F-5	TP401	F-3		
IC402	F-5	TP402	F-3		
IC403	E-5	TP403	F-1		

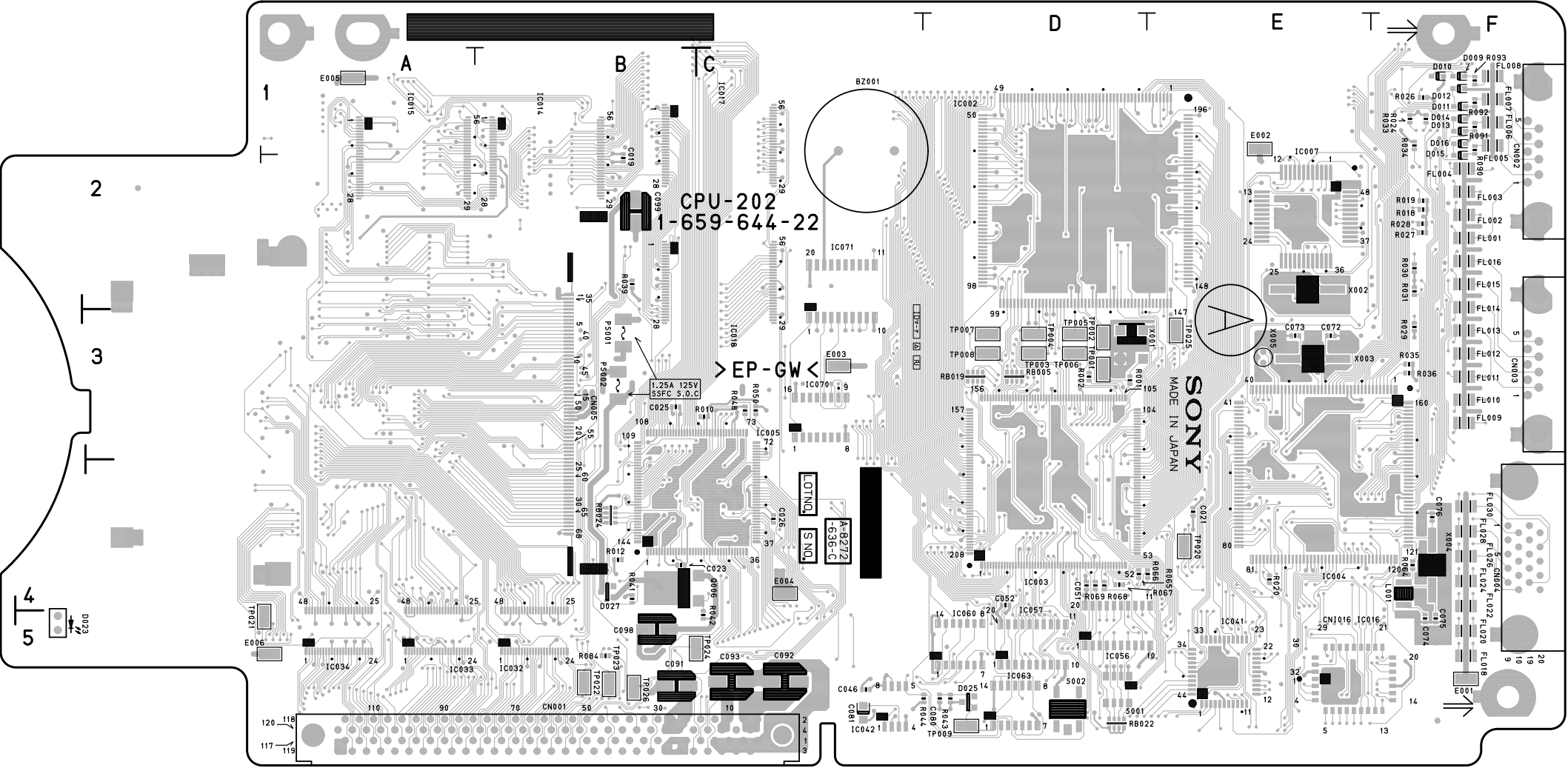


APR-011 -A SIDE-
1-659-650-11
PCS-P500/P500P ; #10001-

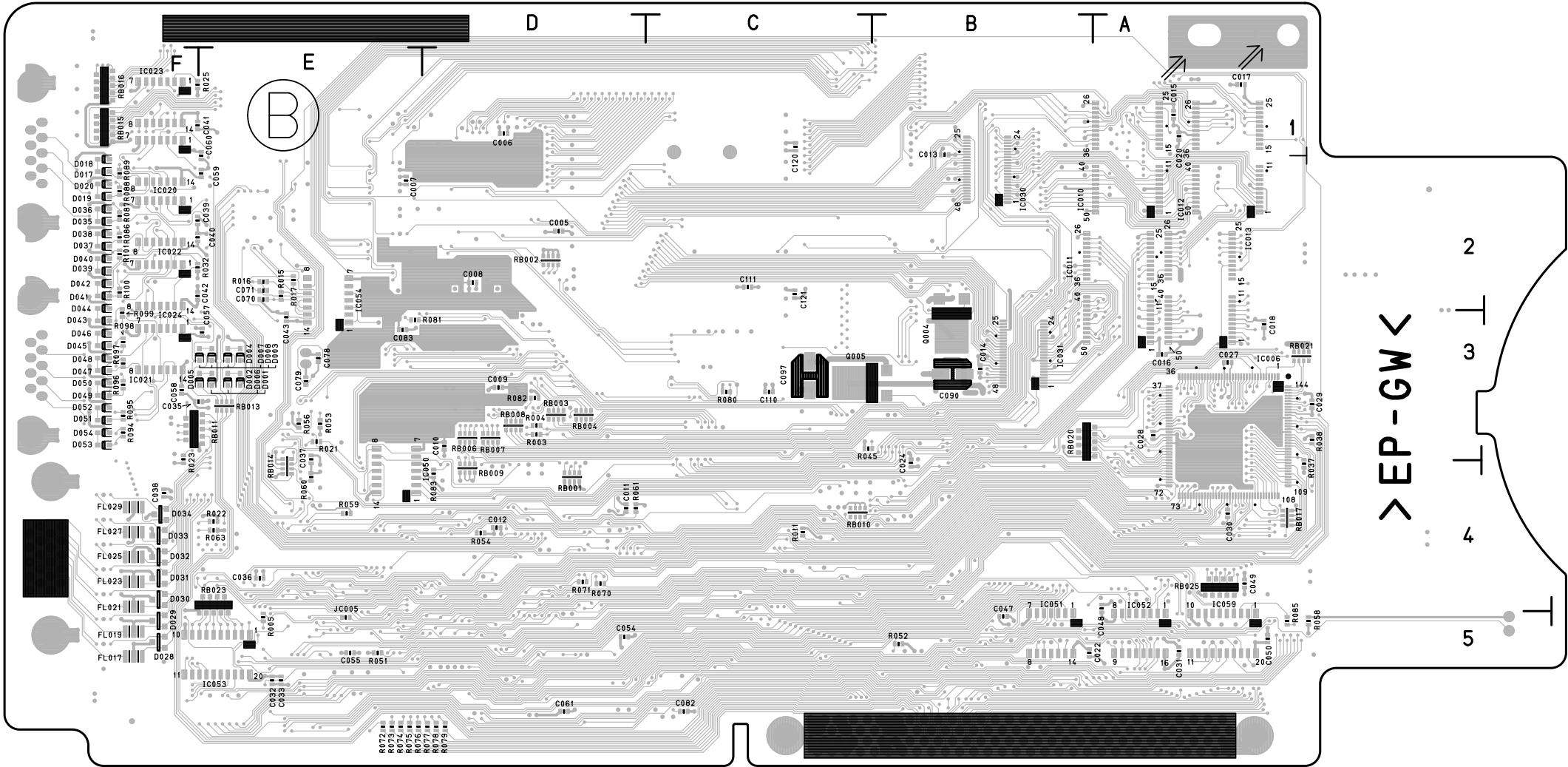


1-659-650-11
PCS-P500/P500P : #10001-

PCS-P500 (J) : SN 63001 and higher
PCS-P500 (UC) : SN 23001 and higher
PCS-P500P (CE) : SN 53001 and higher



CPU-202 -A SIDE-
SUFFIX: -22

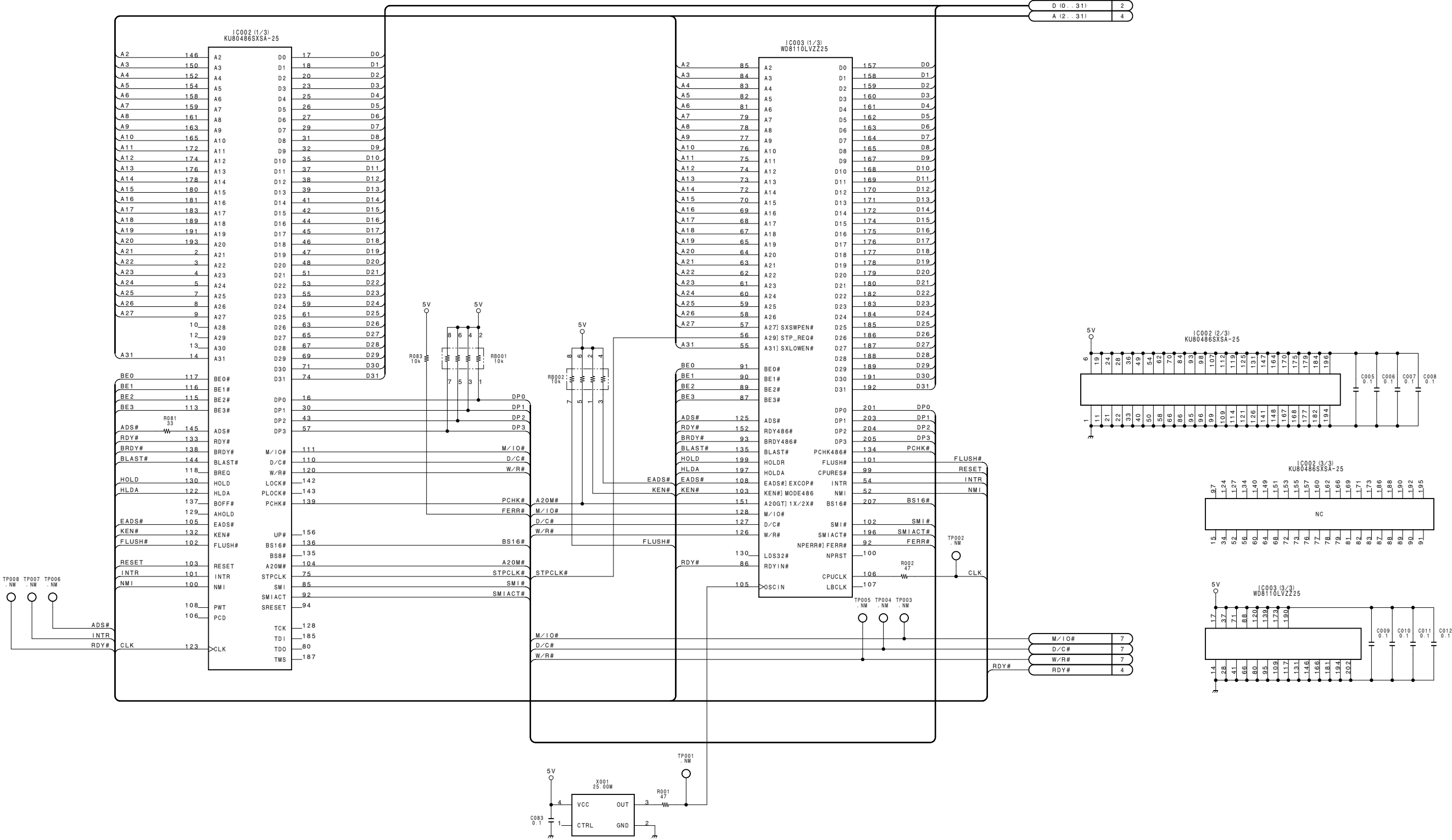


CPU-202 -B SIDE-
SUFFIX: -22

50 (PCS-5100/5100P-J, E)

CPU-202 (1/8); SYSTEM MAIN CONTROL (MEMORY, I/O, IC CARD)

PCS-P500 (J) ; S/N 63001 and higher
PCS-P500 (UC) ; S/N 23001 and higher
PCS-P500P (CE) ; S/N 53001 and higher



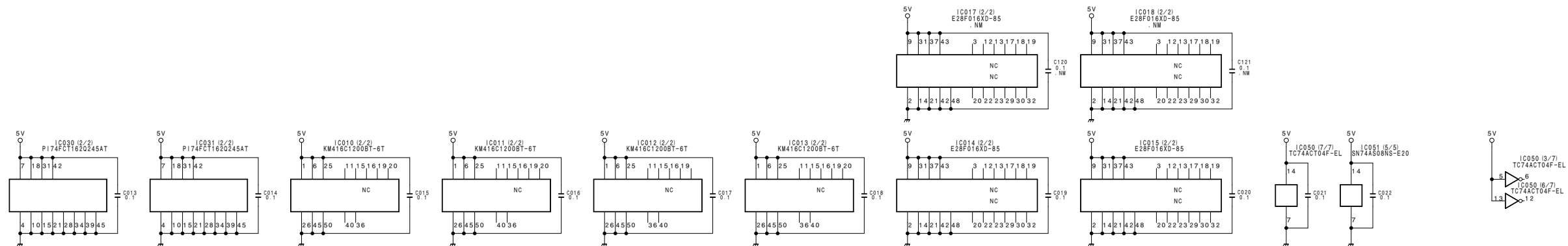
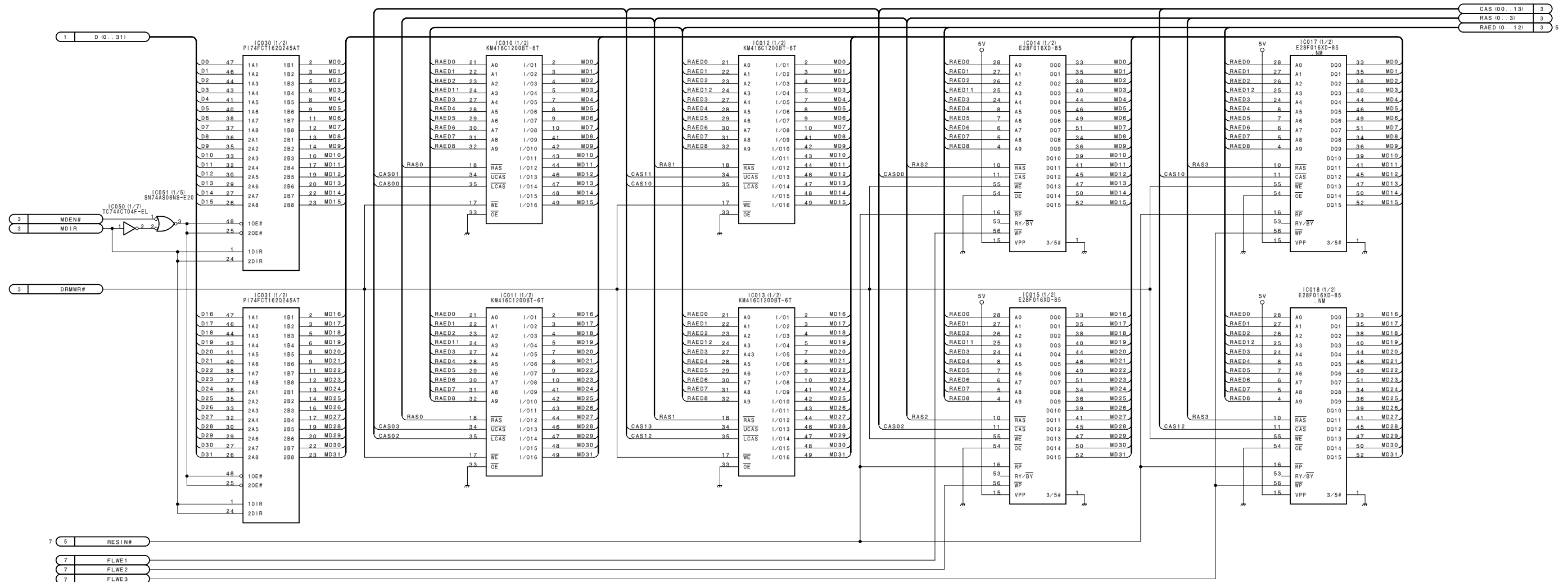
6-16 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-16 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

CPU-202 BOARD (1/8)
1-659-644-22
B-NMX112-CPU202D

CPU-202 (2/8); SYSTEM MAIN CONTROL (MEMORY, I/O, IC CARD)

PCS-P500 (J) ; S/N 63001 and higher
PCS-P500 (UC) ; S/N 23001 and higher
PCS-P500P (CE) ; S/N 53001 and higher



6-17 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-17 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

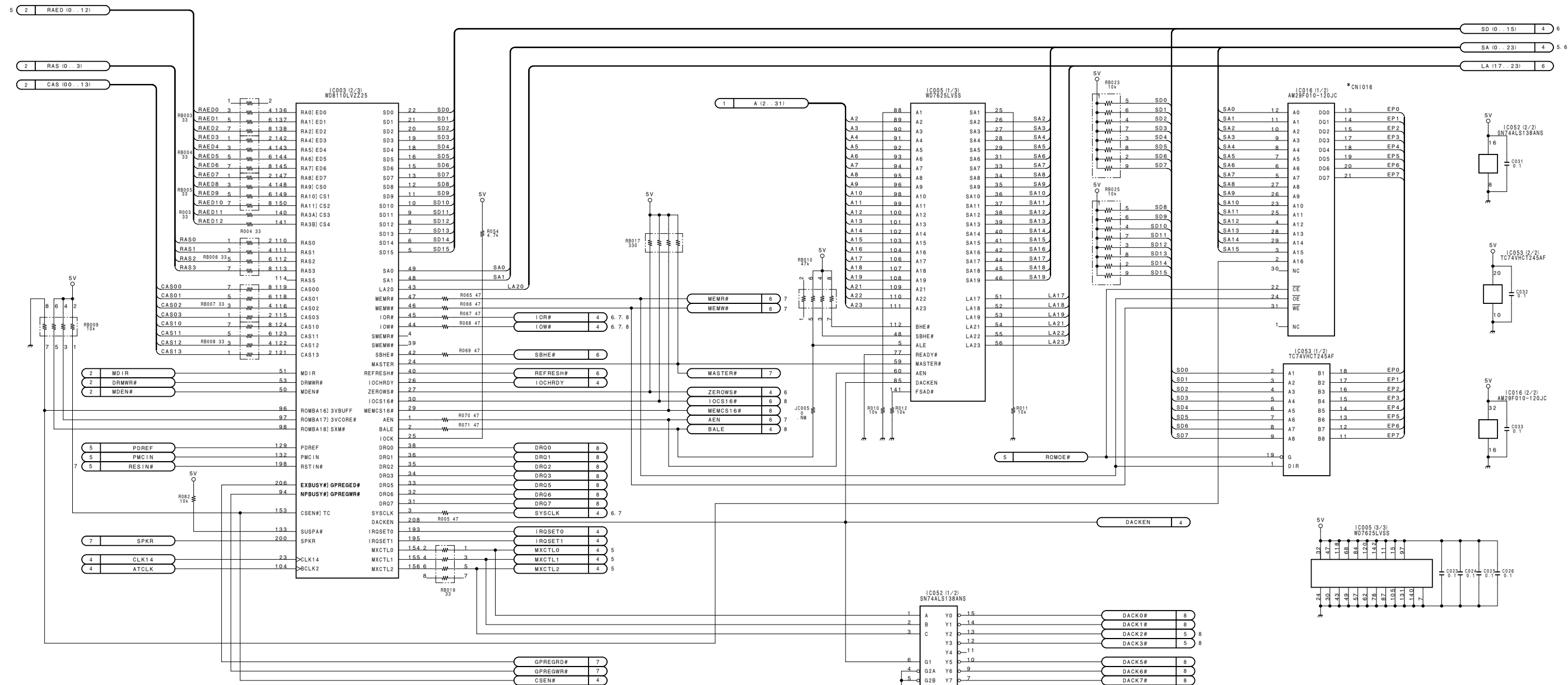
CPU-202 BOARD (2/8)

1-659-644-22
B-NMX112-CPU202D

52 (PCS-5100/5100P-J, E)

CPU-202 (3/8); SYSTEM MAIN CONTROL (MEMORY, I/O, IC CARD)

PCS-P500 (J) ;	S/N 63001 and higher
PCS-P500 (UC) ;	S/N 23001 and higher
PCS-P500P (CE) ;	S/N 53001 and higher

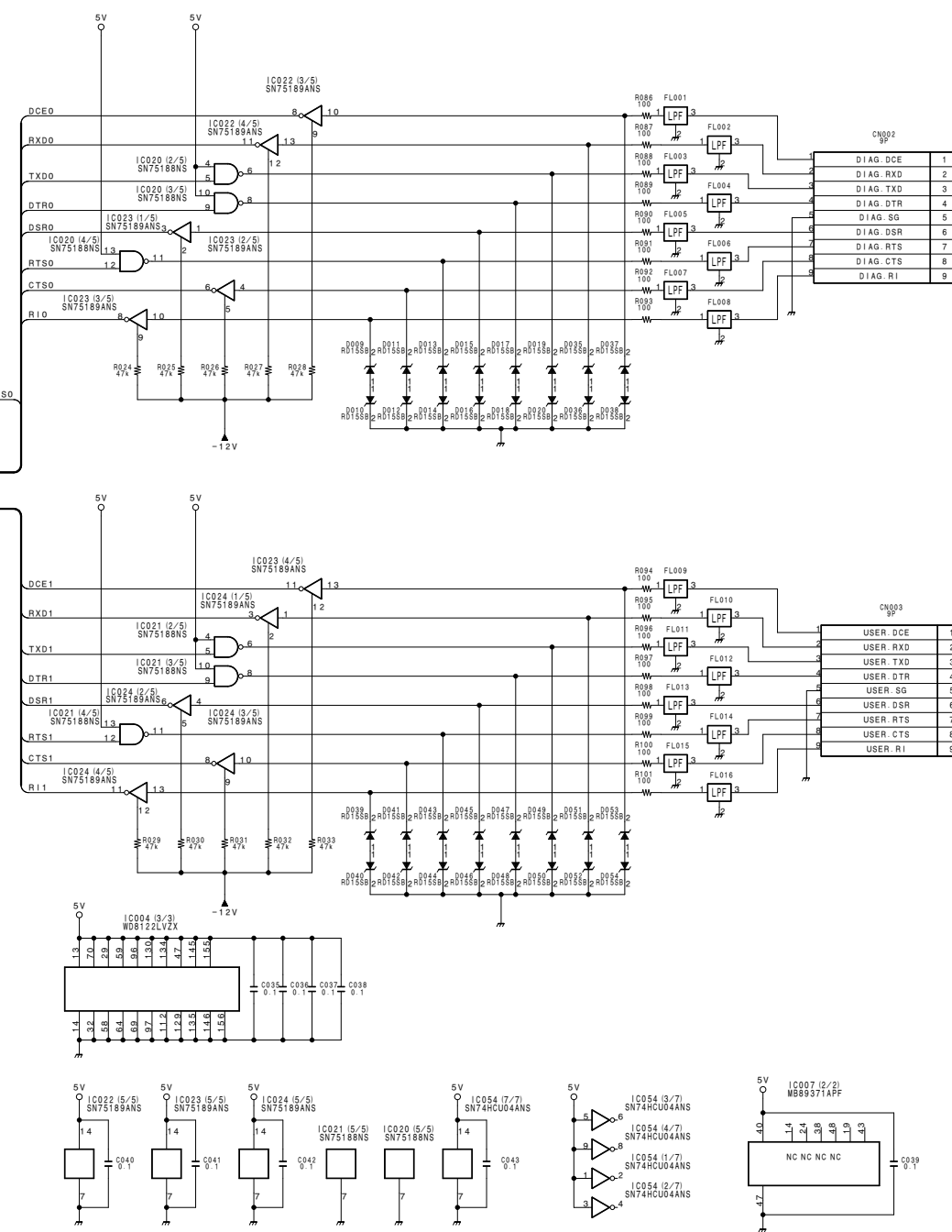
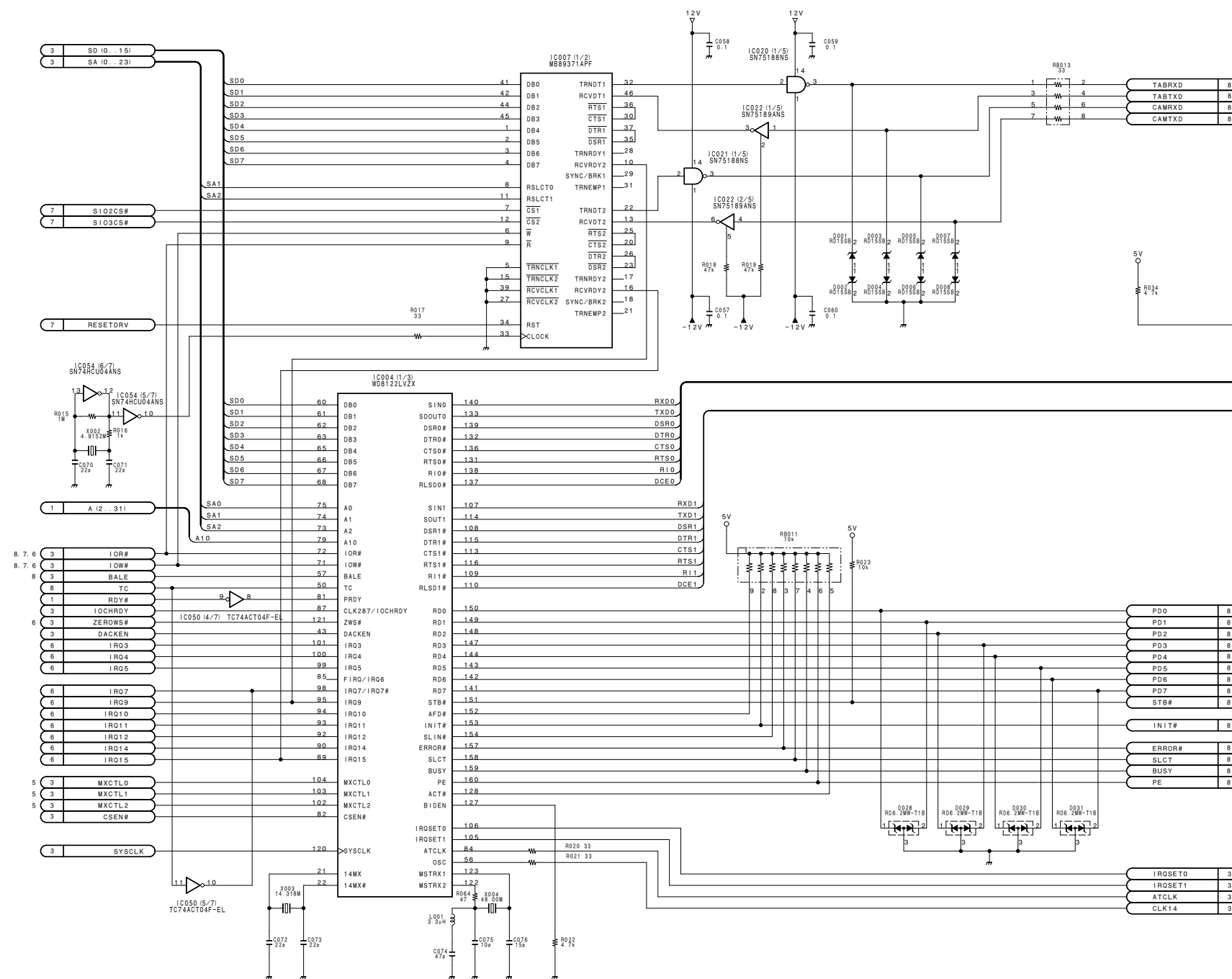


CPU-202 BOARD (3/8)

1-659-644-22
B-NMX112-CPU202D

CPU-202 (4/8); SYSTEM MAIN CONTROL (MEMORY, I/O, IC CARD)

PCS-P500 (J) ;	S/N 63001 and higher
PCS-P500 (UC) ;	S/N 23001 and higher
PCS-P500P (CE) ;	S/N 53001 and higher



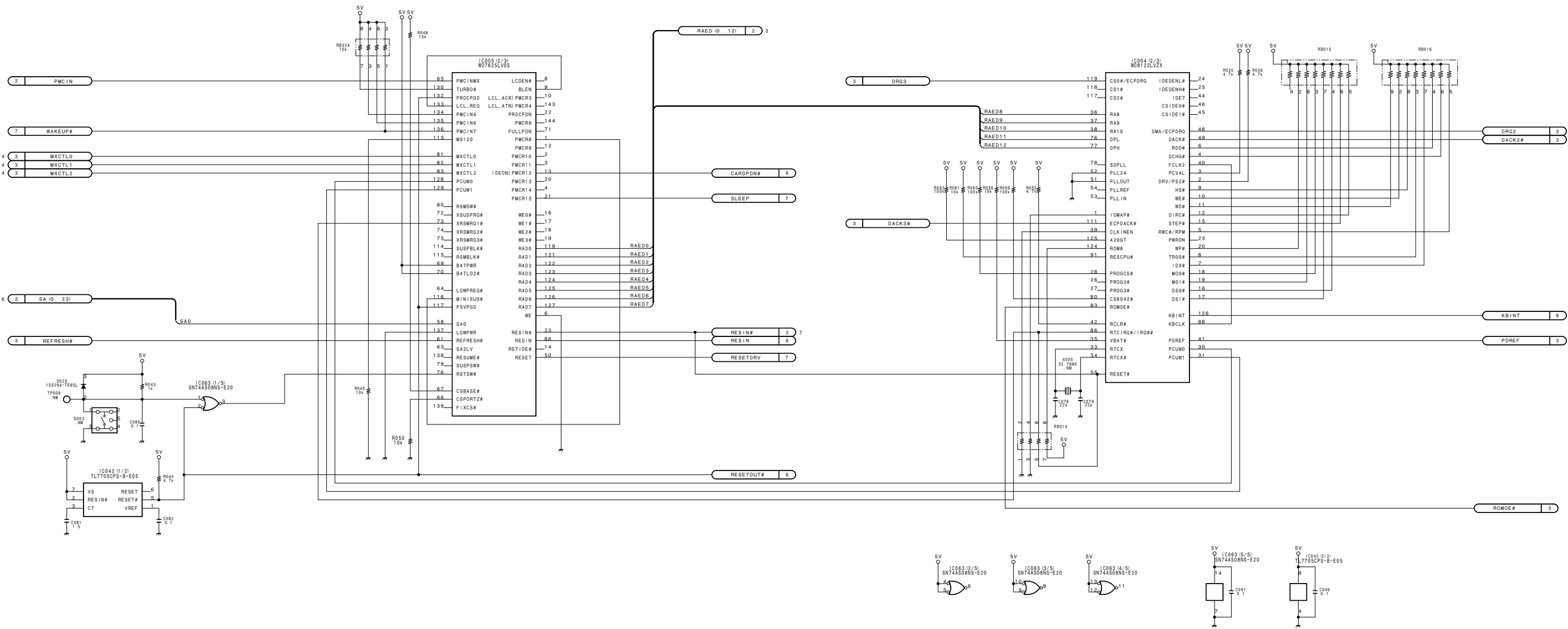
6-19 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-19 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

54 (PCS-5100/5100P-J, E)

CPU-202 (5/8); SYSTEM MAIN CONTROL (MEMORY, I/O, IC CARD)

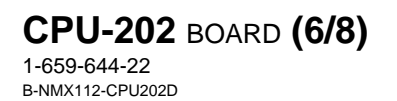
PCS-P500 (J) ; S/N 63001 and higher
PCS-P500 (UC) ; S/N 23001 and higher
PCS-P500P (CE) ; S/N 53001 and higher



CPU-202 BOARD (5/8)

1-659-644-22
B-NMX112-CPU202D

PCS-P500 (J) ;	S/N 63001 and higher
PCS-P500 (UC) ;	S/N 23001 and higher
PCS-P500P (CE) ;	S/N 53001 and higher

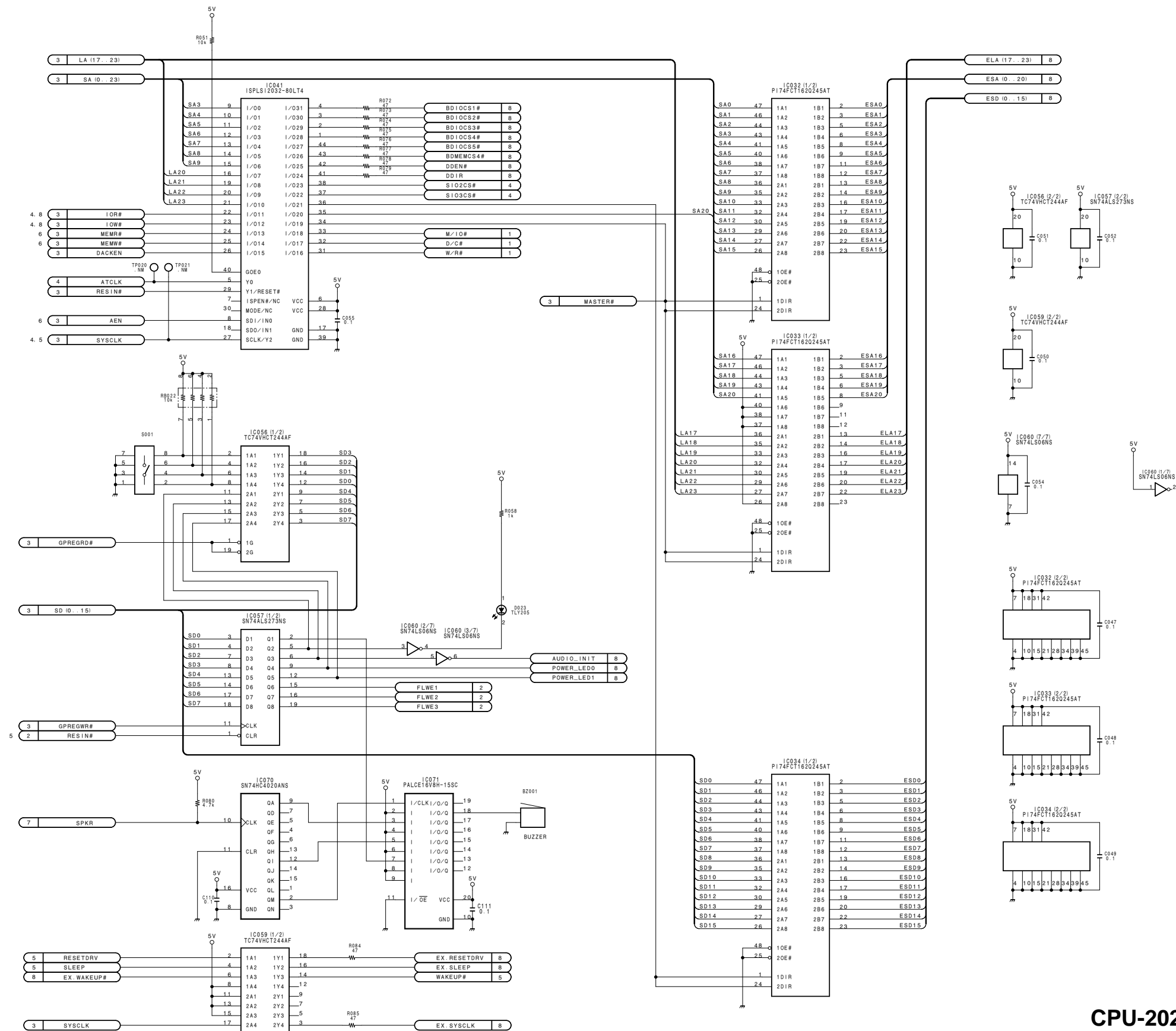


6-21 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

56 (PCS-5100/5100P-J, E)

CPU-202 (7/8); SYSTEM MAIN CONTROL (MEMORY, I/O, IC CARD)

PCS-P500 (J) ;	S/N 63001 and higher
PCS-P500 (UC) ;	S/N 23001 and higher
PCS-P500P (CE) ;	S/N 53001 and higher



6-22 (a)

(PCS-P500/P500P SERVICE MANUAL Volume 2)

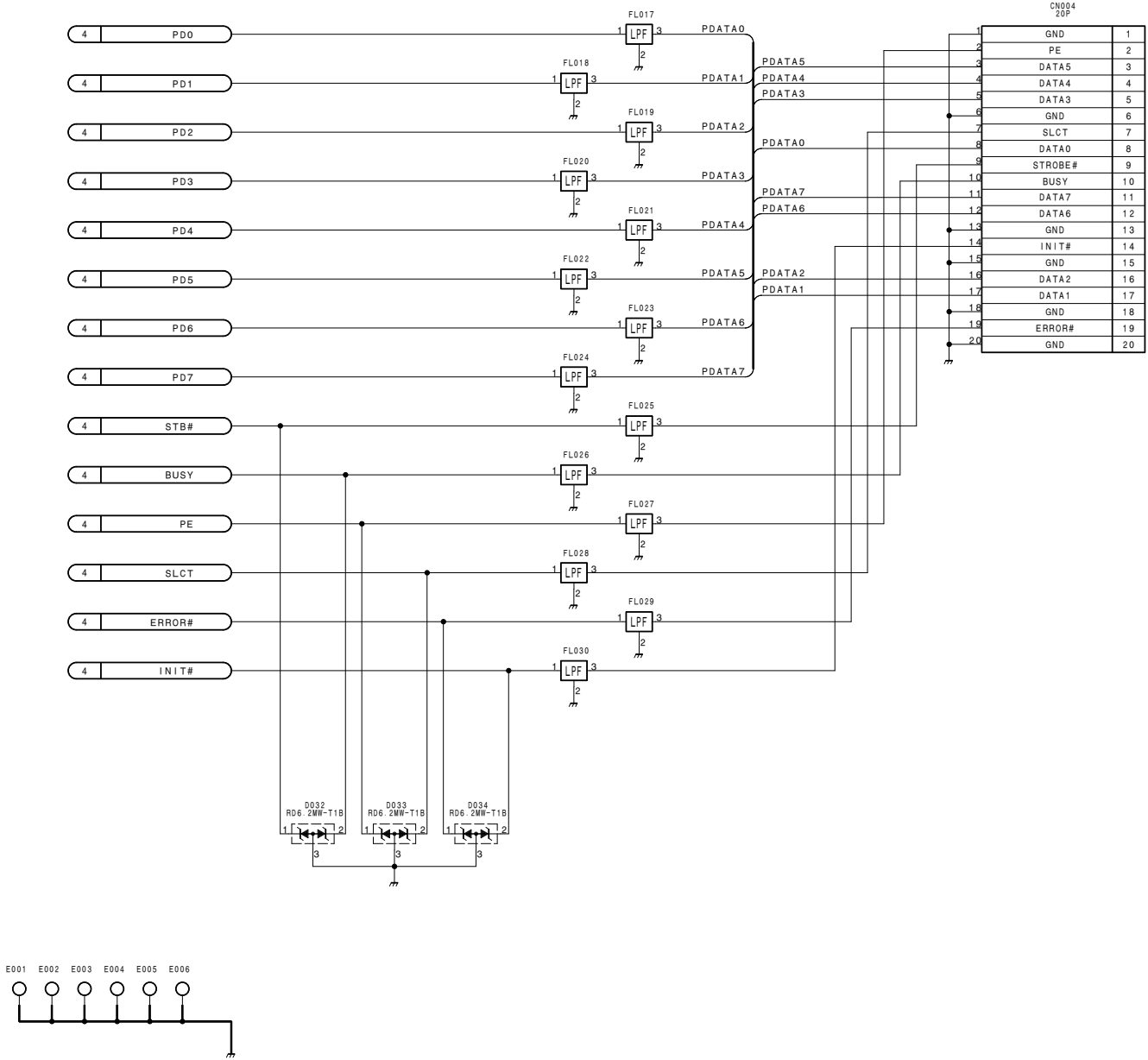
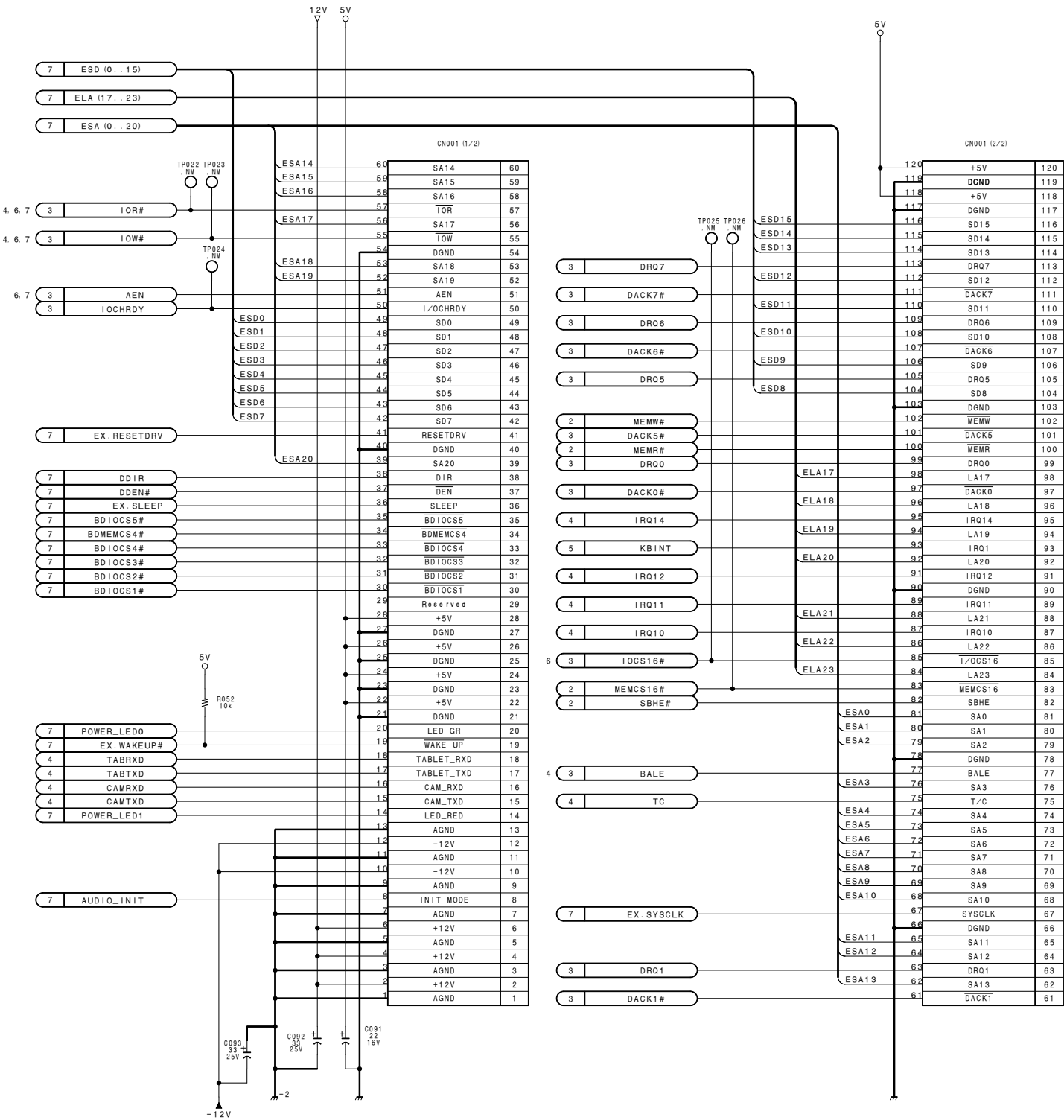
6-22 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

CPU-202 BOARD (7/8)

1-659-644-22
B-NMX112-CPU202D

CPU-202 (8/8); SYSTEM MAIN CONTROL (MEMORY, I/O, IC CARD)

PCS-P500 (J) ; S/N 63001 and higher
PCS-P500 (UC) ; S/N 23001 and higher
PCS-P500P (CE) ; S/N 53001 and higher



6-23 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-23 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

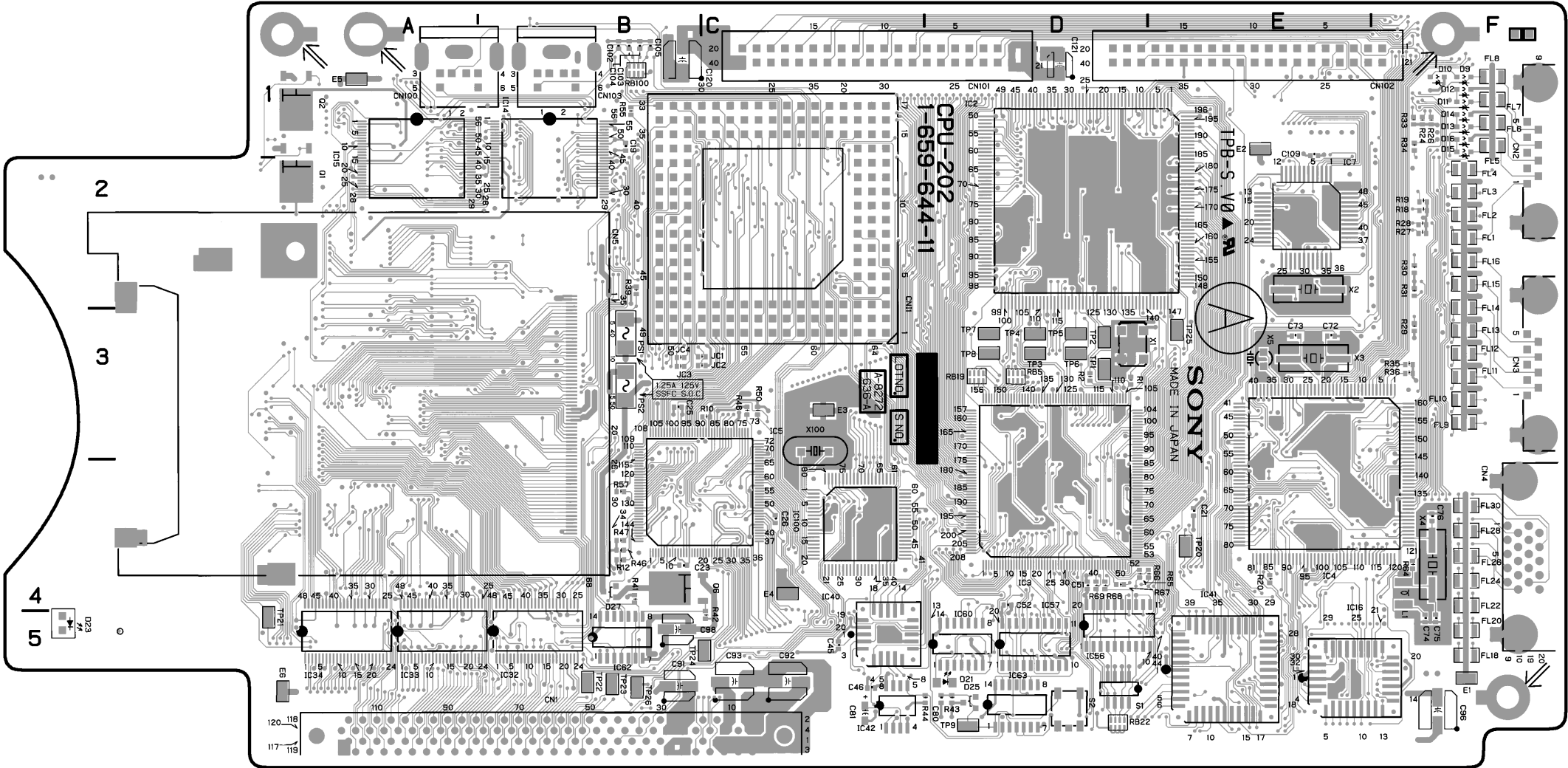
58 (PCS-5100/5100P-J, E)

CPU-202 ; SYSTEM MAIN CONTROL (MEMORY, I/O, IC CARD)

CPU-202 (1-659-644-11)

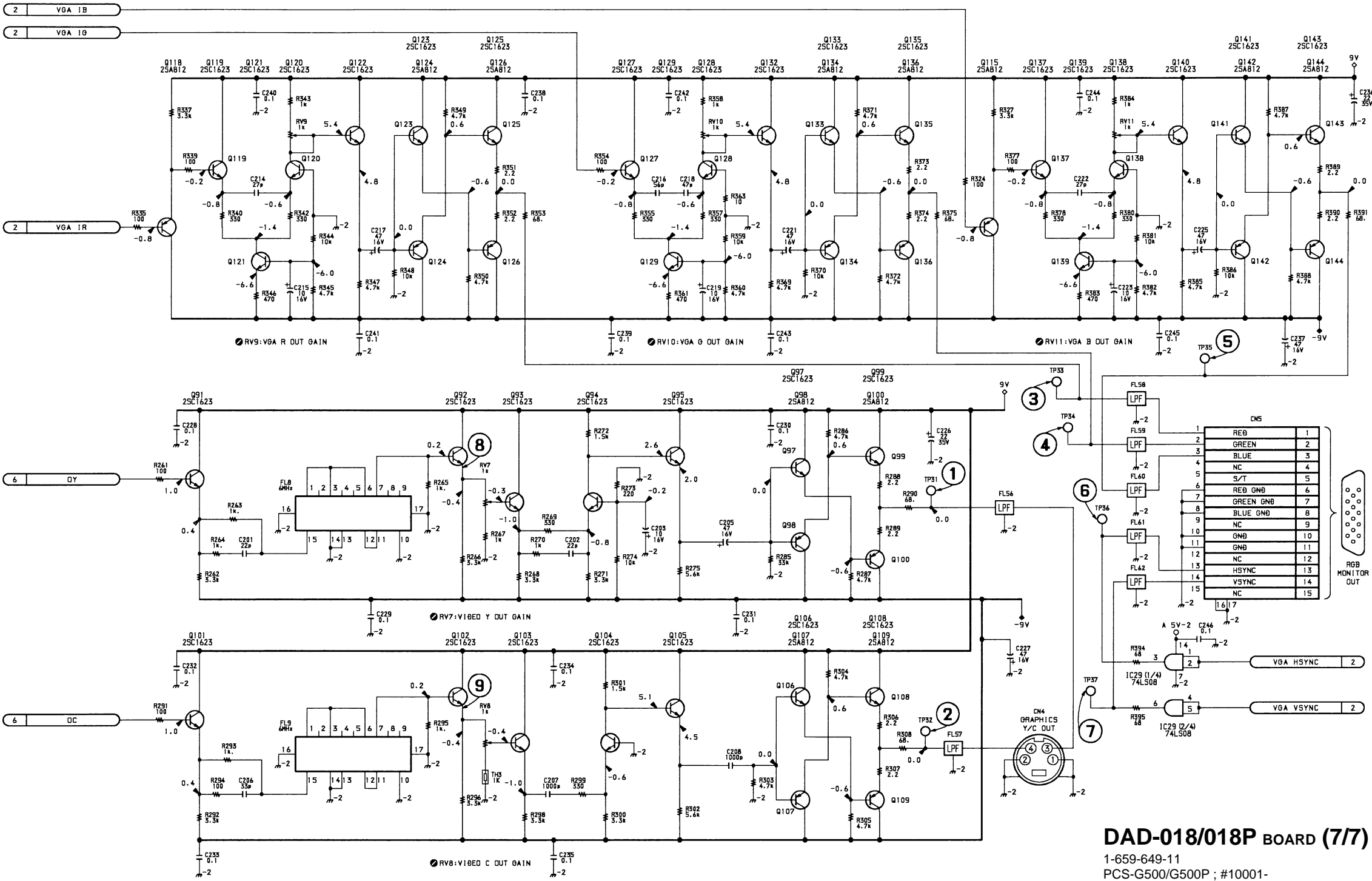
*:B SDIE

CNI16	E-5	E5	A-1	IC60	D-5
CNI40	C-4	E6	A-5	IC62	B-5
CNI41	E-4			IC63	D-5
CN1	C-5	FL1	F-2	JC5	*E-5
CN2	F-1	FL2	F-2		
CN3	F-3	FL3	F-2	L1	F-4
CN4	F-4	FL4	F-1		
CN5	B-3	FL5	F-1	PS1	B-3
		FL6	F-1		
		FL7	F-1		
D1	*E-3	FL8	F-1	Q1	A-2
D2	*E-3	FL9	F-3	Q2	A-1
D3	*E-3	FL10	F-3	Q4	*B-3
D4	*E-3	FL11	F-3		
D5	*E-3	FL12	F-3	RB1	*D-4
D6	*E-3	FL13	F-3	RB2	*D-2
D7	*E-3	FL14	F-2	RB3	*D-3
D8	*E-3	FL15	F-2	RB4	*D-3
D9	F-1	FL16	F-2	RB5	D-3
D10	F-1	FL17	*F-5	RB6	*D-3
D11	F-1	FL18	F-5	RB7	*D-3
D12	F-1	FL19	*F-5	RB8	*D-3
D13	F-1	FL20	F-5	RB9	*D-4
D14	F-1	FL21	*F-4	RB10	*C-4
D15	F-1	FL22	F-4	RB11	*F-3
D16	F-1	FL23	*F-4	RB13	*E-3
D17	*F-2	FL24	F-4	RB14	*E-4
D18	*F-2	FL25	*F-4	RB15	*F-1
D19	*F-2	FL26	F-4	RB16	*F-1
D20	*F-2	FL27	*F-4	RB17	*A-4
D21	D-5	FL28	F-4	RB19	D-3
D23	A-5	FL29	*F-4	RB20	*B-3
D25	D-5		F-4	RB21	*A-3
D28	*F-5			RB22	D-5
D29	*F-5	IC2	D-2	RB23	*E-4
D30	*F-4	IC3	D-4		
D31	*F-4	IC4	E-4	S1	D-5
D32	*F-4	IC5	B-4		
D33	*F-4	IC6	*A-3	TP1	D-3
D34	*F-4	IC7	E-2	TP2	D-3
D35	*F-2	IC10	*A-1	TP3	D-3
D36	*F-2	IC11	*A-2	TP4	D-3
D37	*F-2	IC12	*A-1	TP5	D-3
D38	*F-2	IC13	*A-2	TP6	D-3
D39	*F-2	IC14	B-2	TP7	D-3
D40	*F-2	IC15	A-2	TP8	D-3
D41	*F-2	IC20	*F-2	TP9	D-5
D42	*F-2	IC21	*F-3	TP20	E-4
D43	*F-3	IC22	*F-2	TP21	A-5
D44	*F-2	IC23	*F-1	TP22	B-5
D45	*F-3	IC24	*F-2	TP23	B-5
D46	*F-3	IC30	*B-2	TP24	C-5
D47	*F-3	IC31	*B-3	TP25	E-3
D48	*F-3	IC32	B-5	TP26	B-5
D49	*F-3	IC33	A-5		
D50	*F-3	IC34	A-5	X1	D-3
D51	*F-3	IC42	C-5	X2	E-2
D52	*F-3	IC50	*E-4	X3	E-3
D53	*F-3	IC51	*B-5	X4	F-4
D54	*F-3	IC52	*A-5		
		IC53	*E-5		
E1	F-5	IC54	*E-2		
E2	E-1	IC56	D-5		
E3	C-3	IC57	D-5		
E4	C-4	IC59	*A-5		

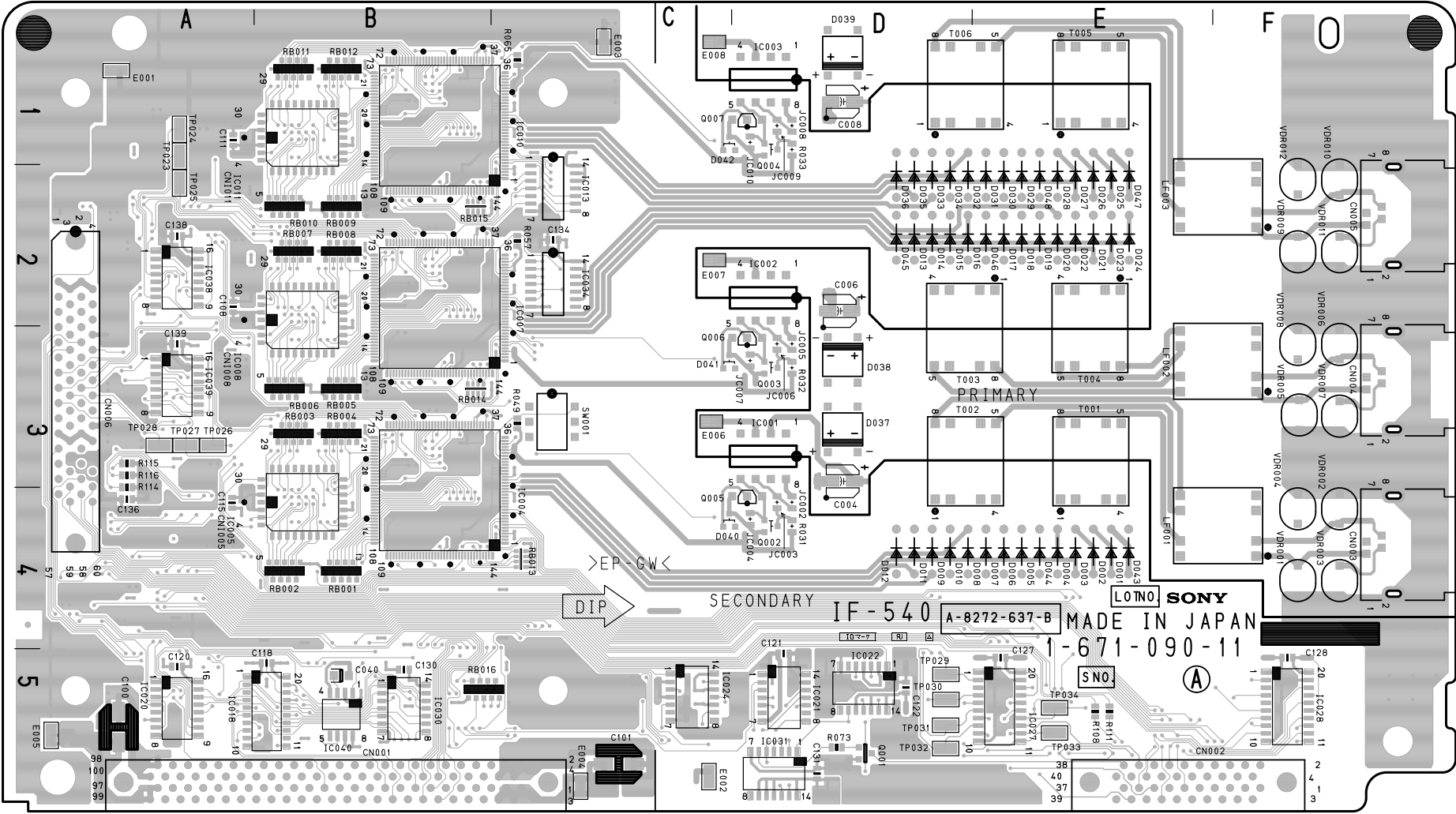


CPU-202 -A SIDE-
1-659-644-11
PCS-P500/P500P ; #10001-

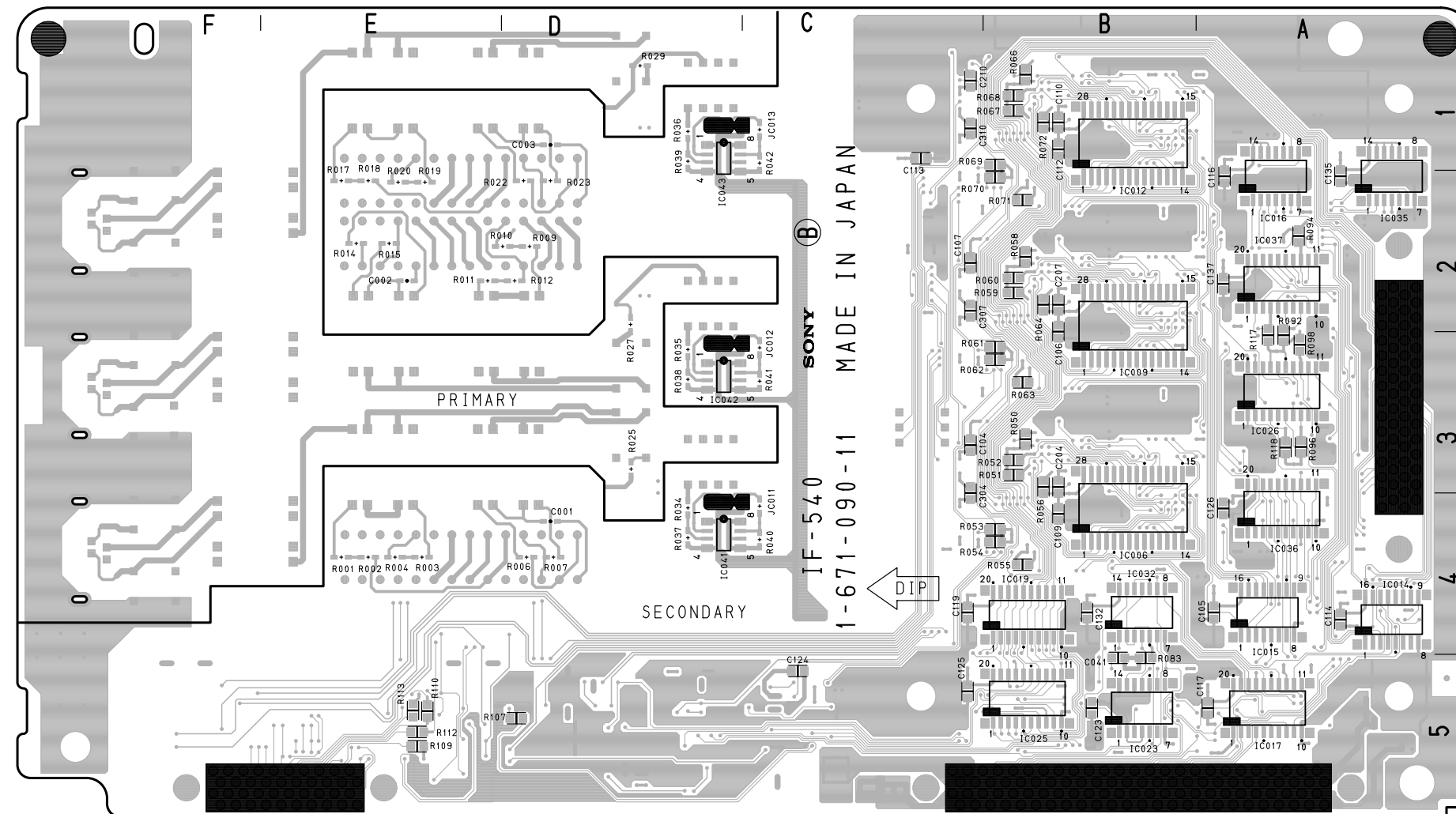
DAD-018/018P (7/7); DUAL MONITOR, U.V DECODE, RGB → Y.U.V CONVERT



PCS-P500 (J) : SN 63001 and higher
PCS-P500 (UC) : SN 23001 and higher



IF-540 -A SIDE-
SUFFIX: -11



IF-540 -B SIDE-
SUFFIX: -11

62 (PCS-5100/5100P-J, E)

IF-540 (1/5); ISDN INTERFACE

PCS-P500 (J) ; S/N 63001 and higher
PCS-P500 (UC) ; S/N 23001 and higher

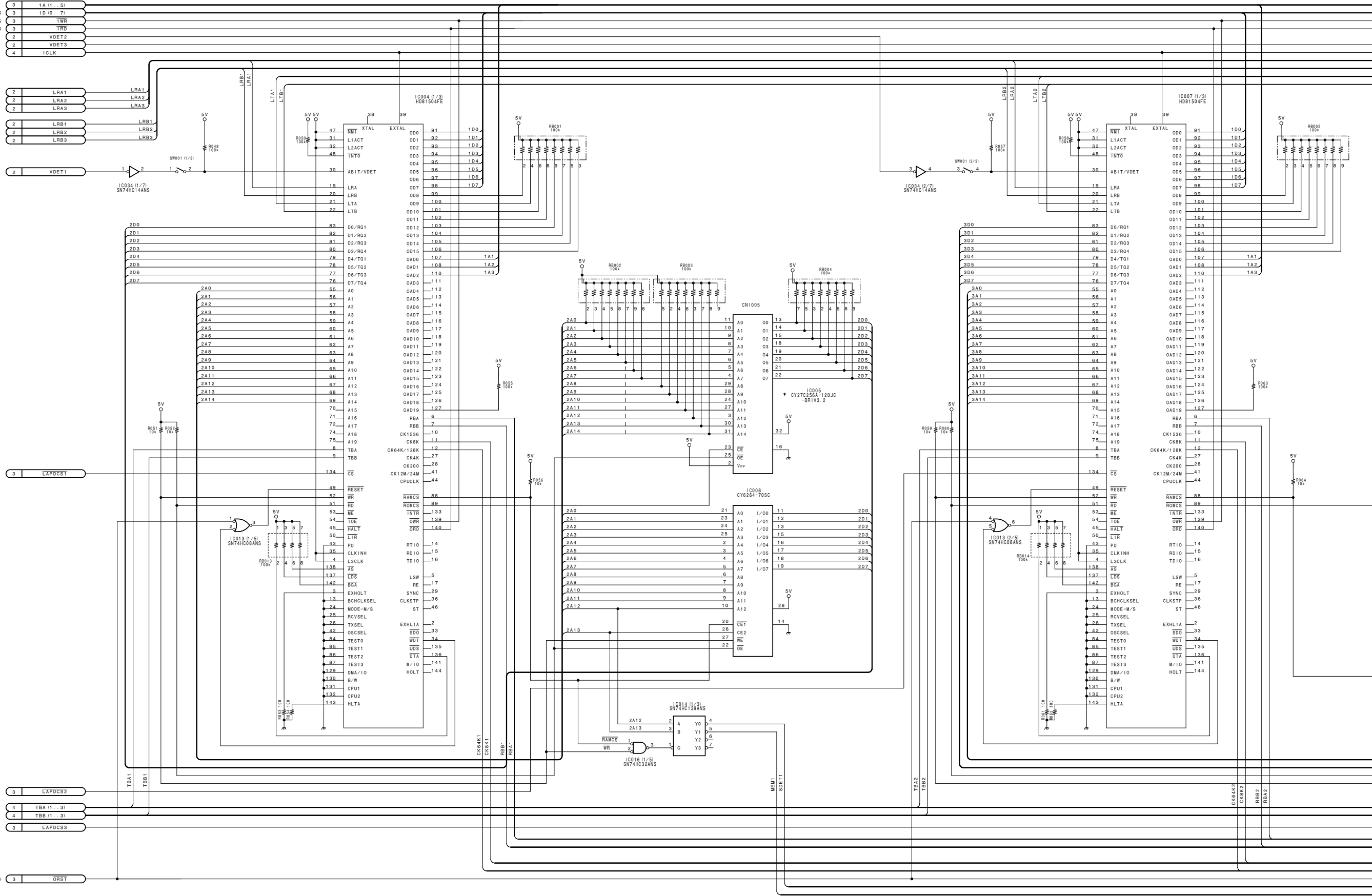
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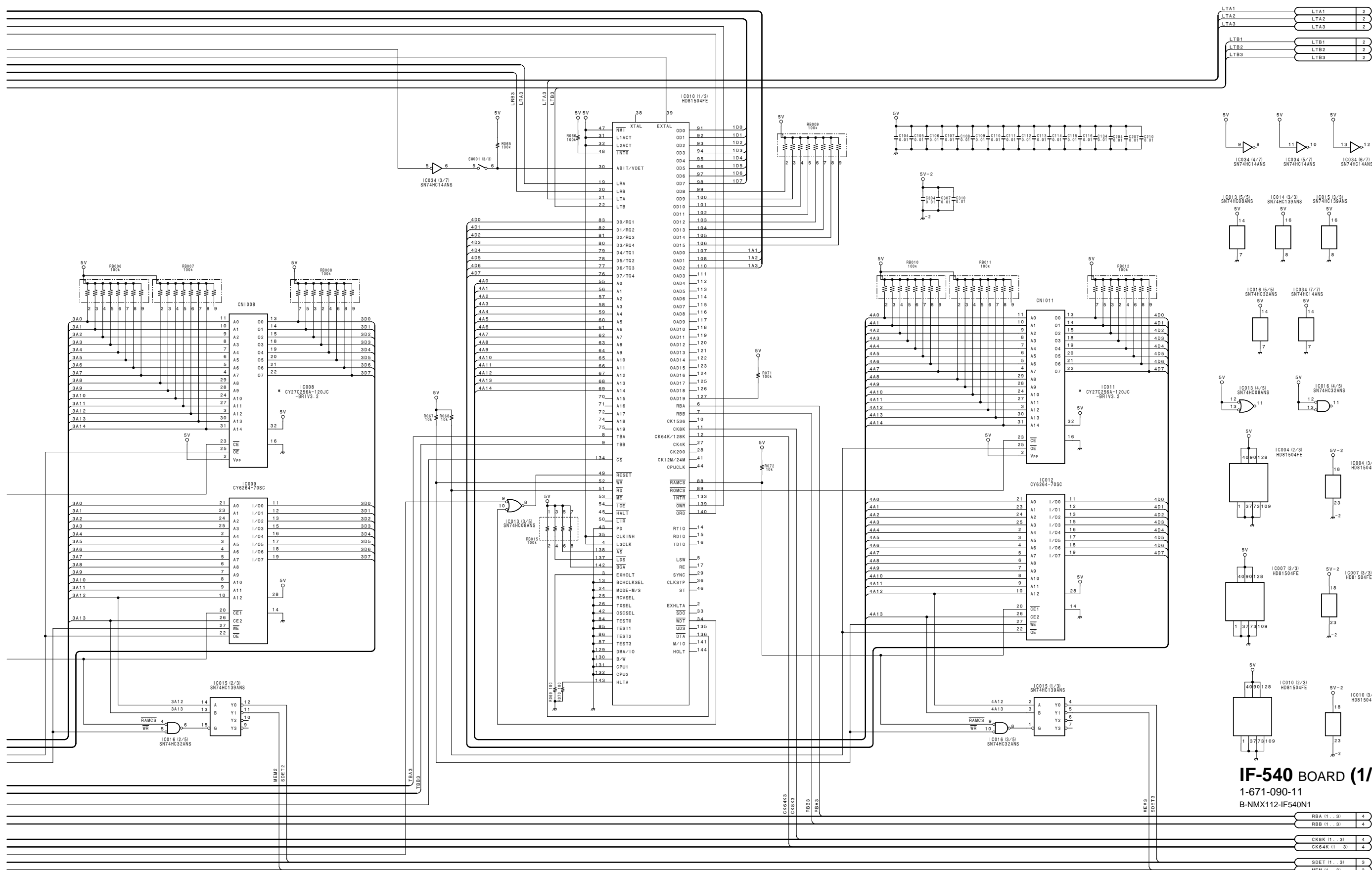
2

3

4

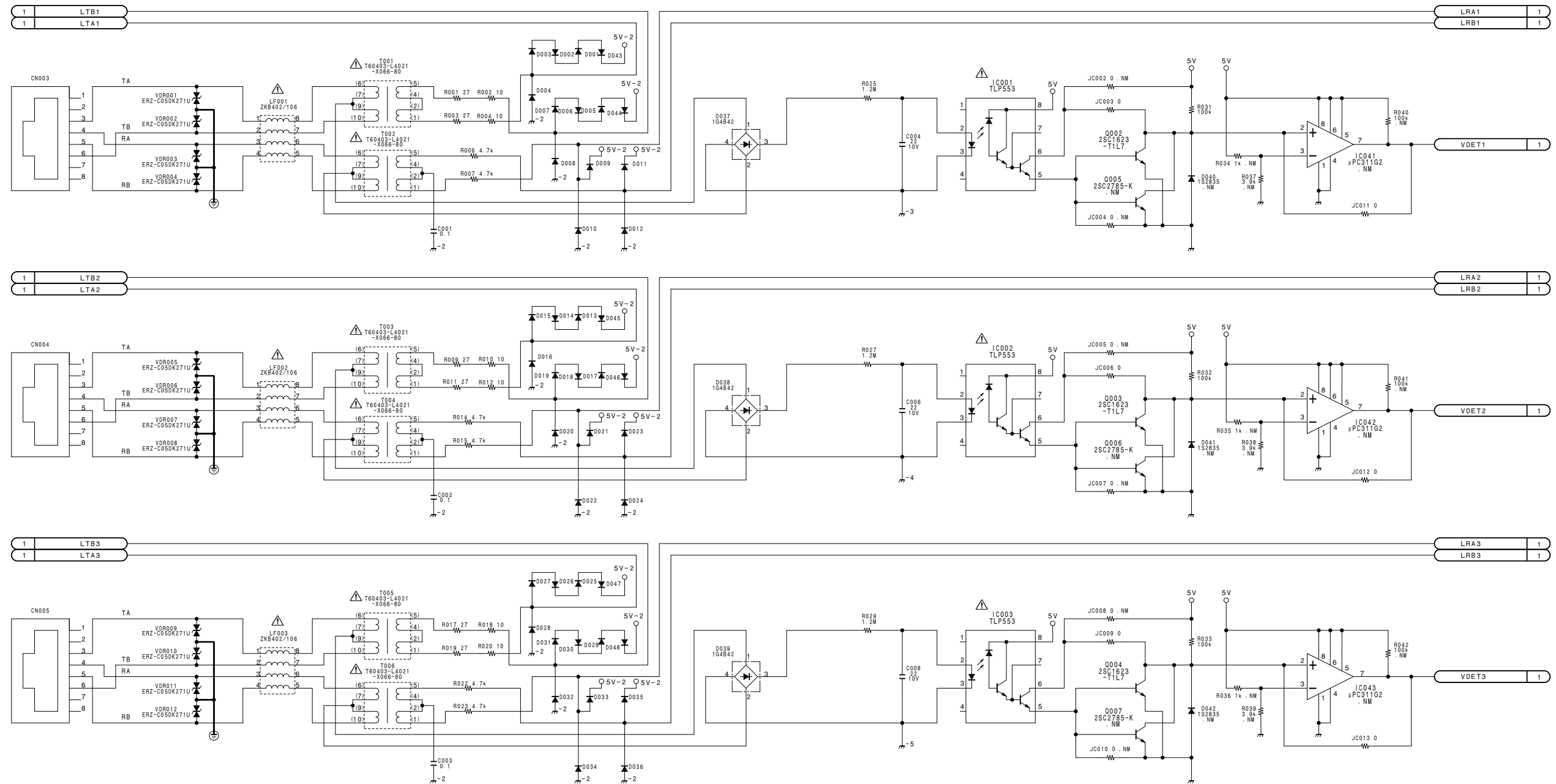
5





IF-540 (2/5); ISDN INTERFACE

PCS-P500 (J) ;	S/N 63001 and higher
PCS-P500 (UC) ;	S/N 23001 and higher



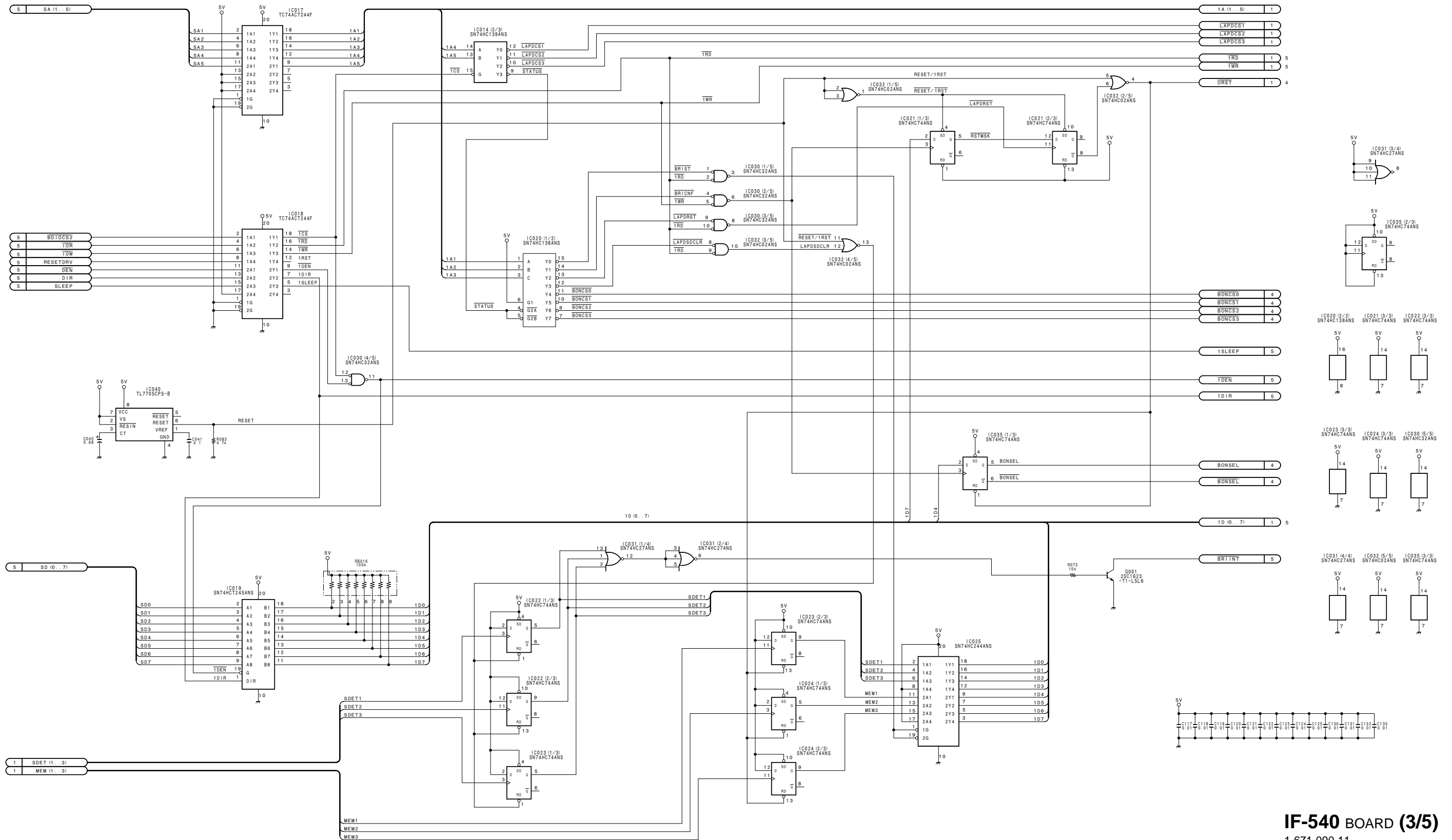
IF-540 BOARD (2/5)
1-671-090-11
B-NMX112-IF540N1

6-76 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-76 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

IF-540 (3/5); ISDN INTERFACE

PCS-P500 (J) ;	S/N 63001 and higher
PCS-P500 (UC) ;	S/N 23001 and higher



6-77 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-77 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

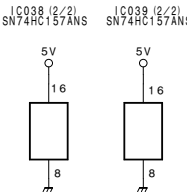
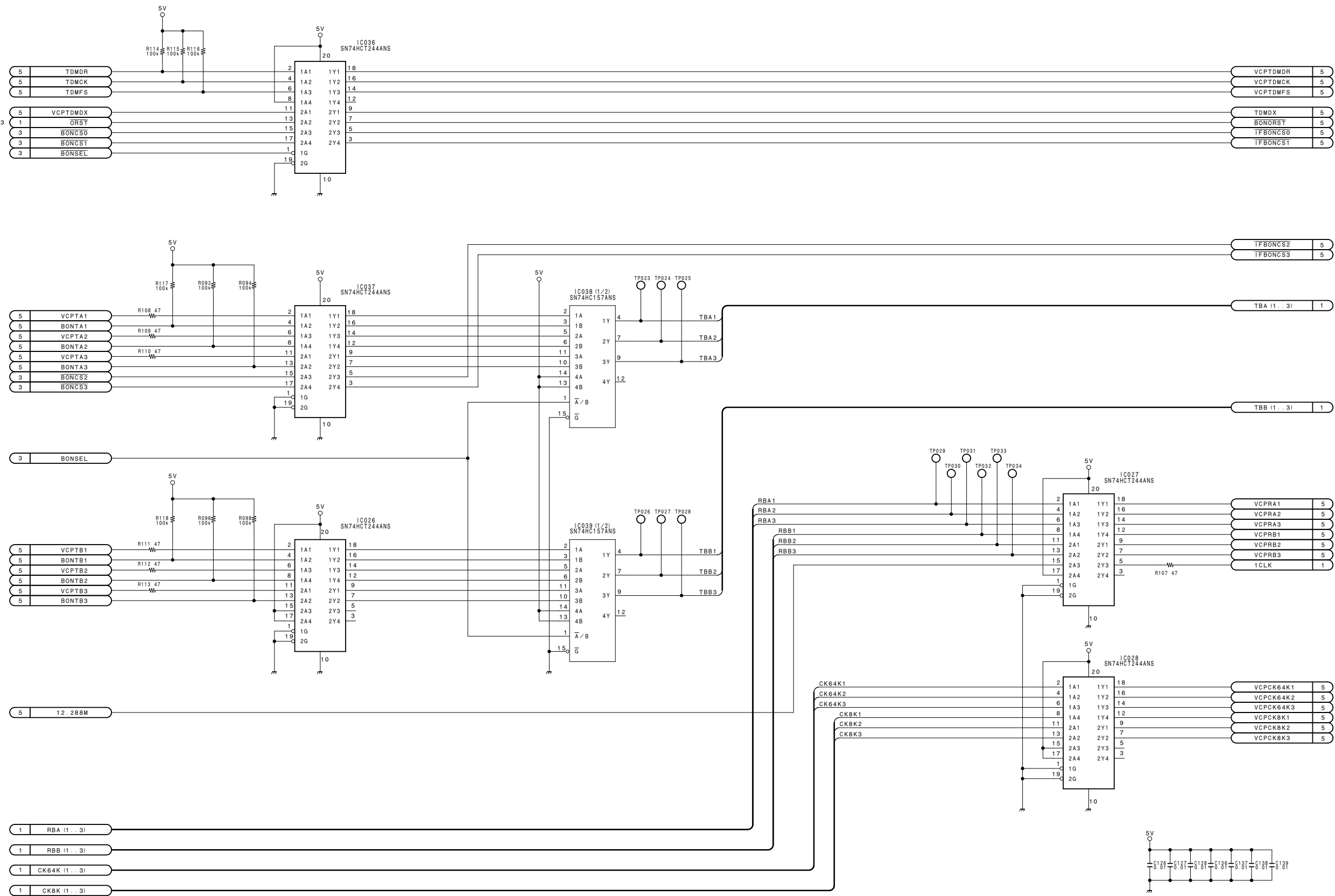
IF-540 BOARD (3/5)

1-671-090-11
B-NMX112-IF540N1

66 (PCS-5100/5100P-J, E)

IF-540 (4/5); ISDN INTERFACE

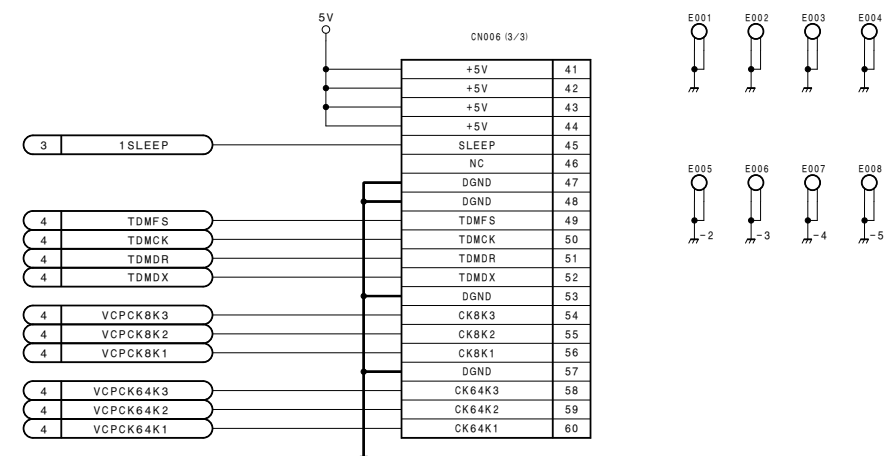
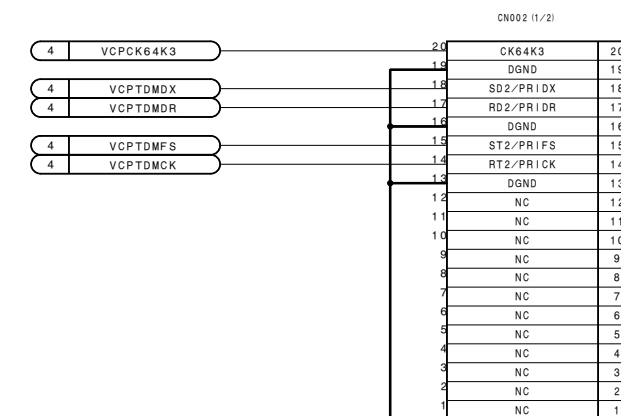
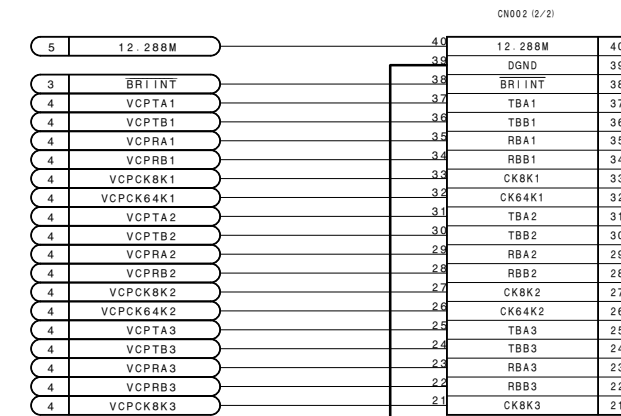
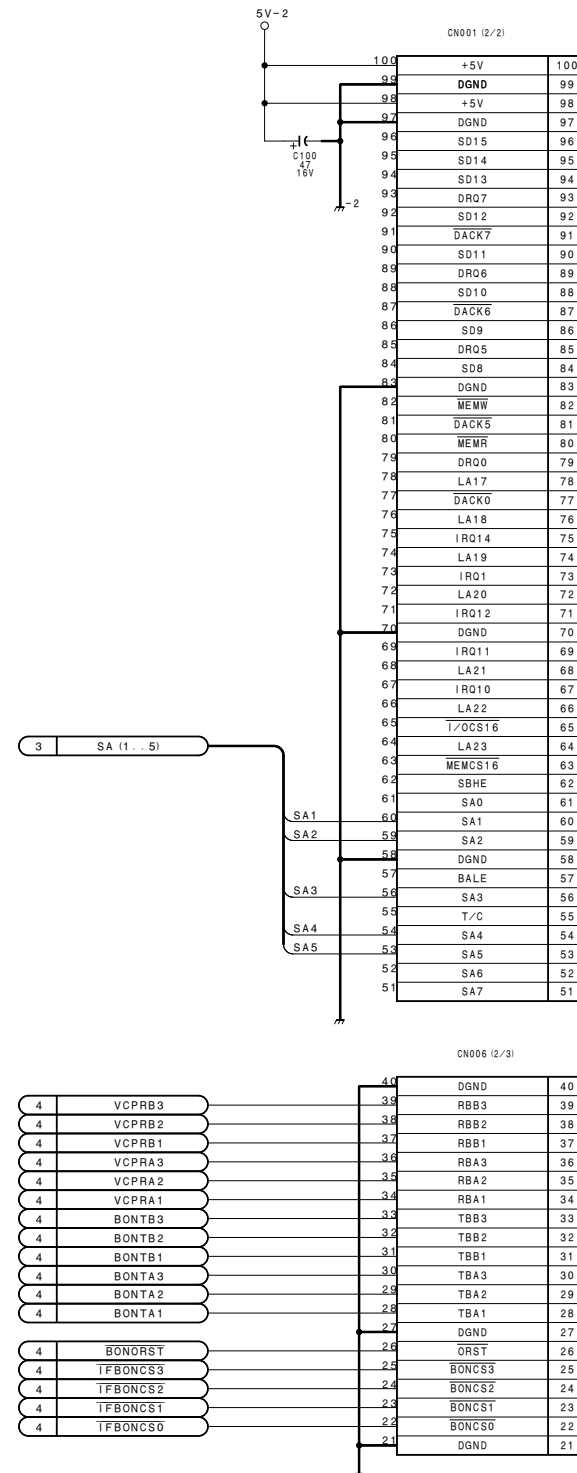
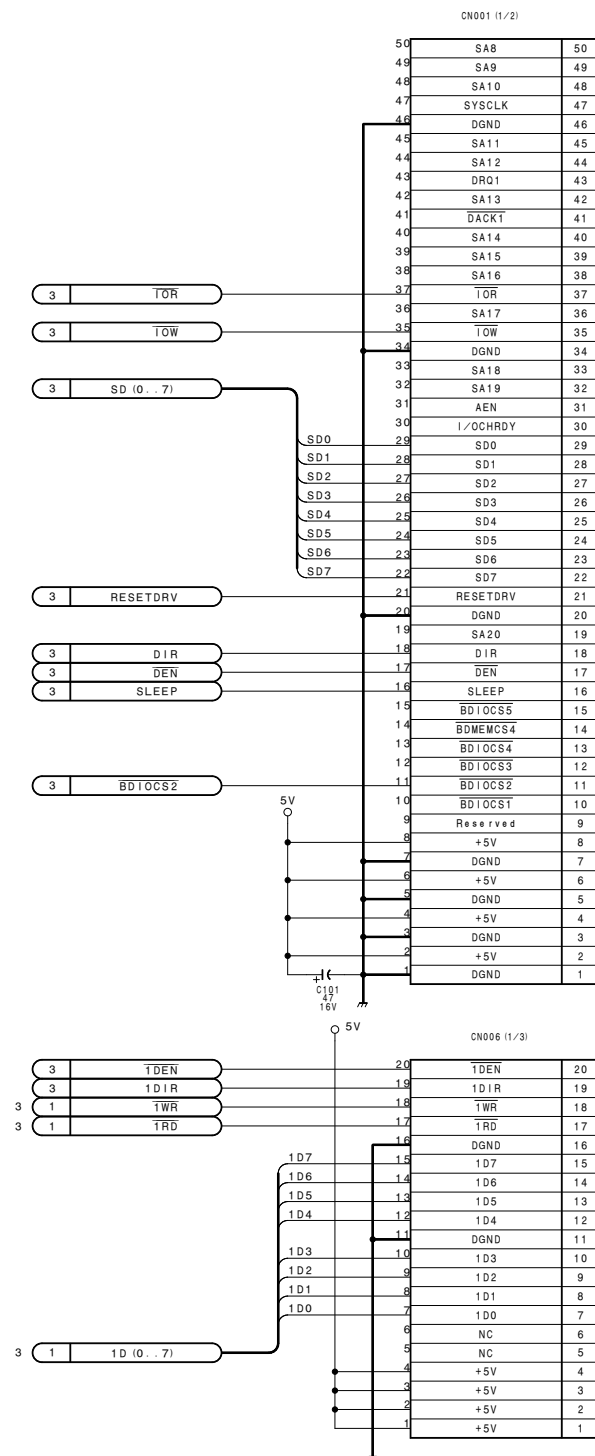
PCS-P500 (J) ; S/N 63001 and higher
PCS-P500 (UC) ; S/N 23001 and higher



IF-540 BOARD (4/5)
1-671-090-11
B-NMX112-IF540N1

IF-540 (5/5); ISDN INTERFACE

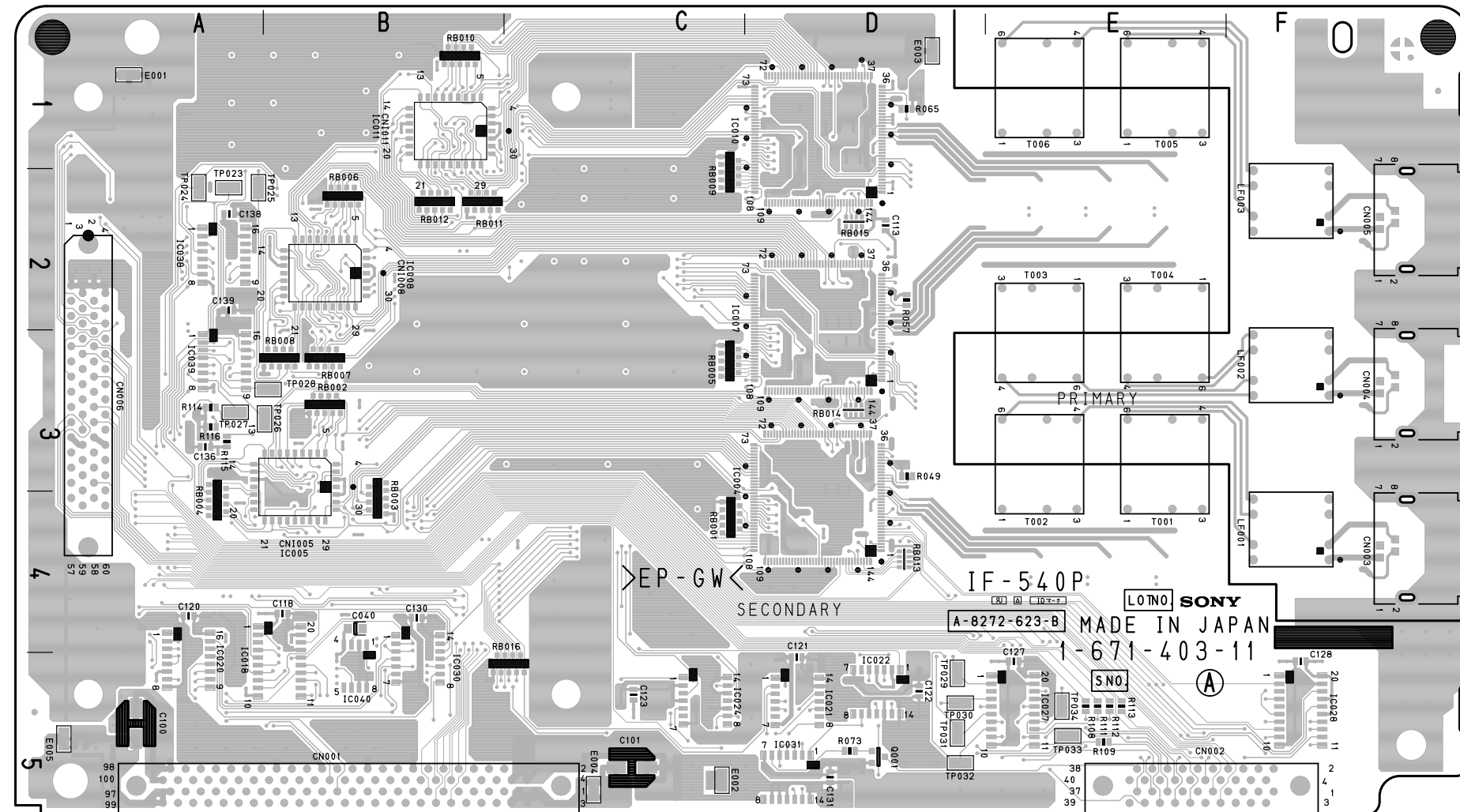
PCS-P500 (J) ;	S/N 63001 and higher
PCS-P500 (UC) ;	S/N 23001 and higher



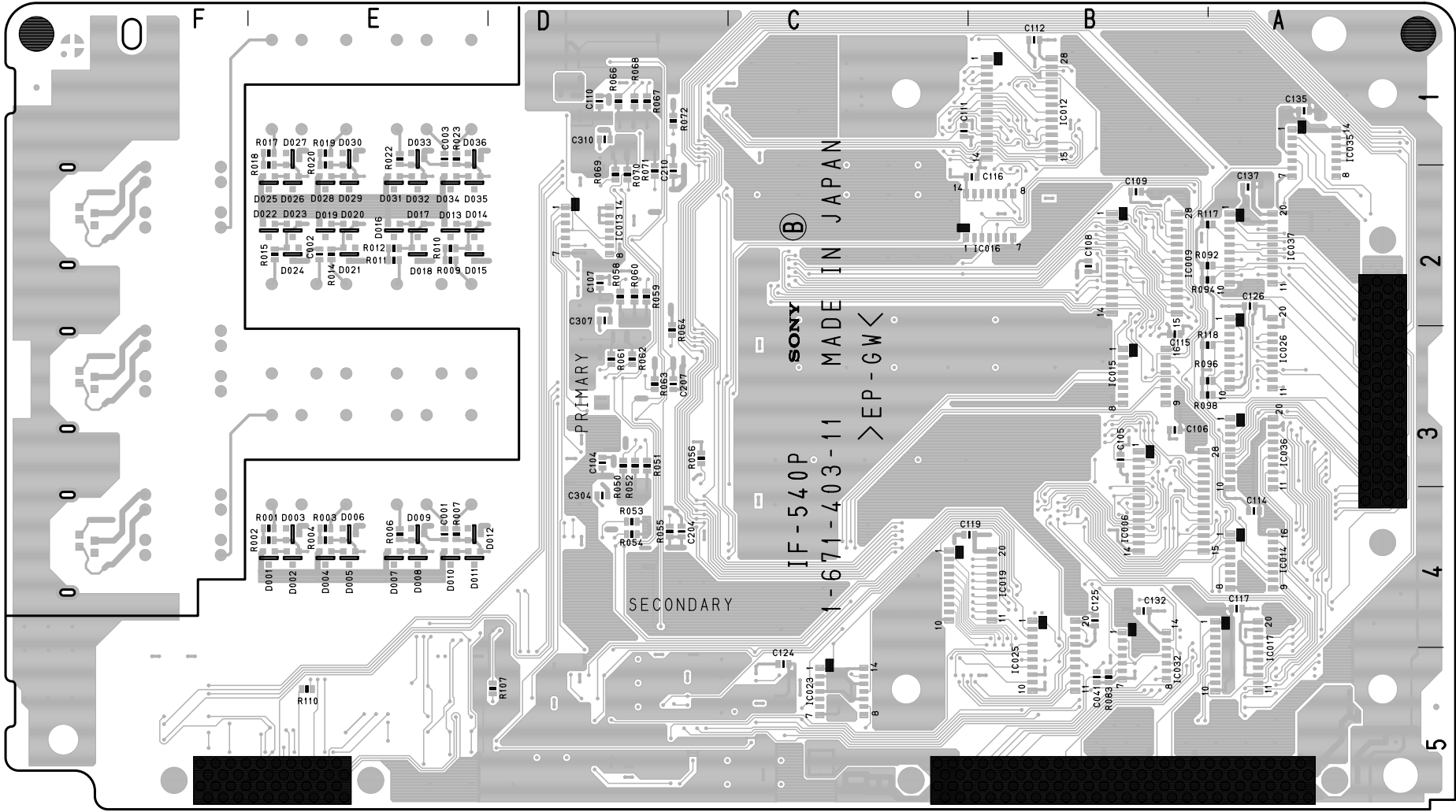
6-79 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-79 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

PCS-P500P (CE) : SN 53001 and higher



IF-540P -A SIDE-
SUFFIX: -11



IF-540P -B SIDE-
SUFFIX: -11

70 (PCS-5100/5100P-J, E)

IF-540P (1/5); ISDN INTERFACE

PCS-P500P (CE) ; S/N 53001 and higher

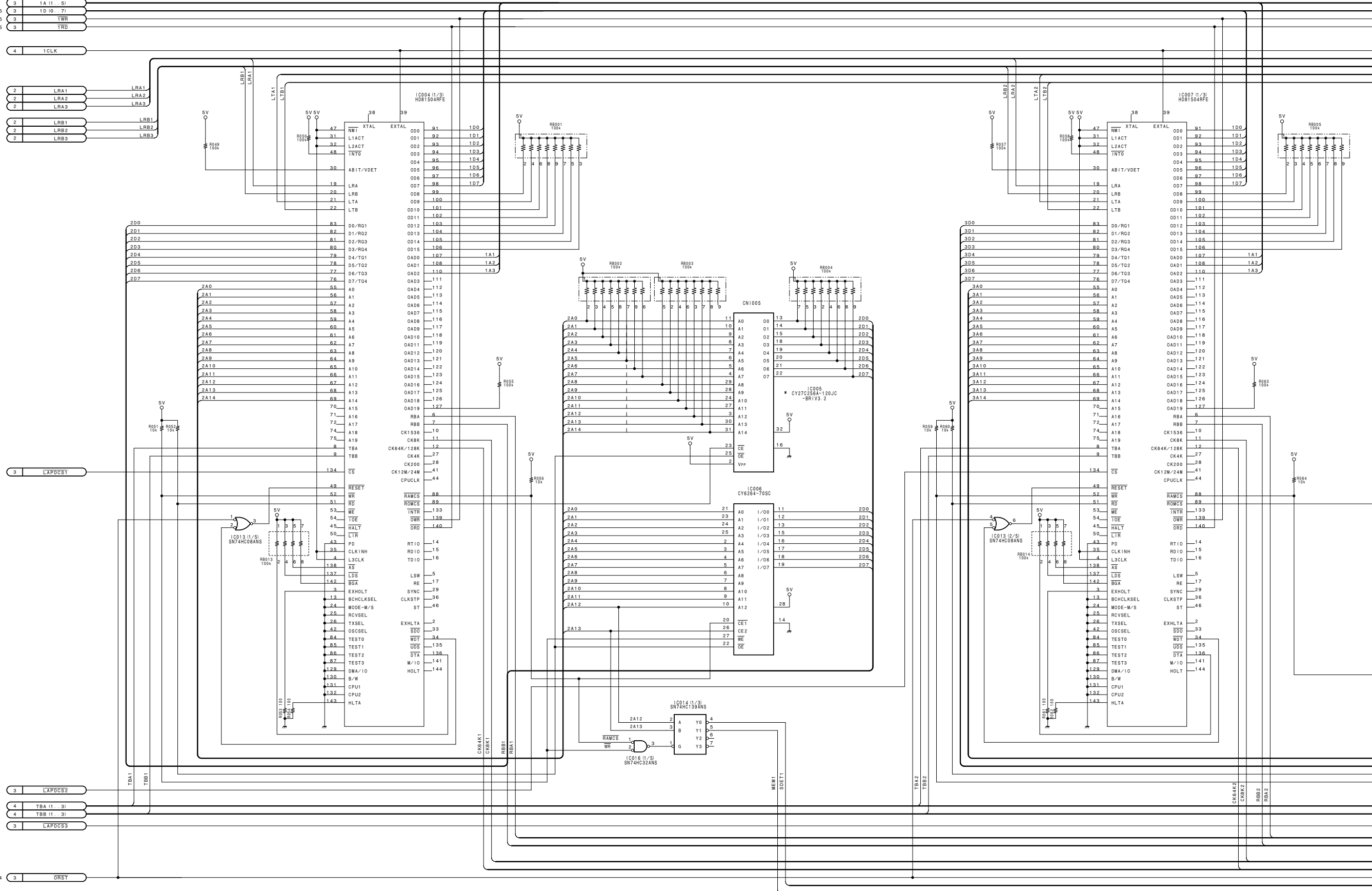
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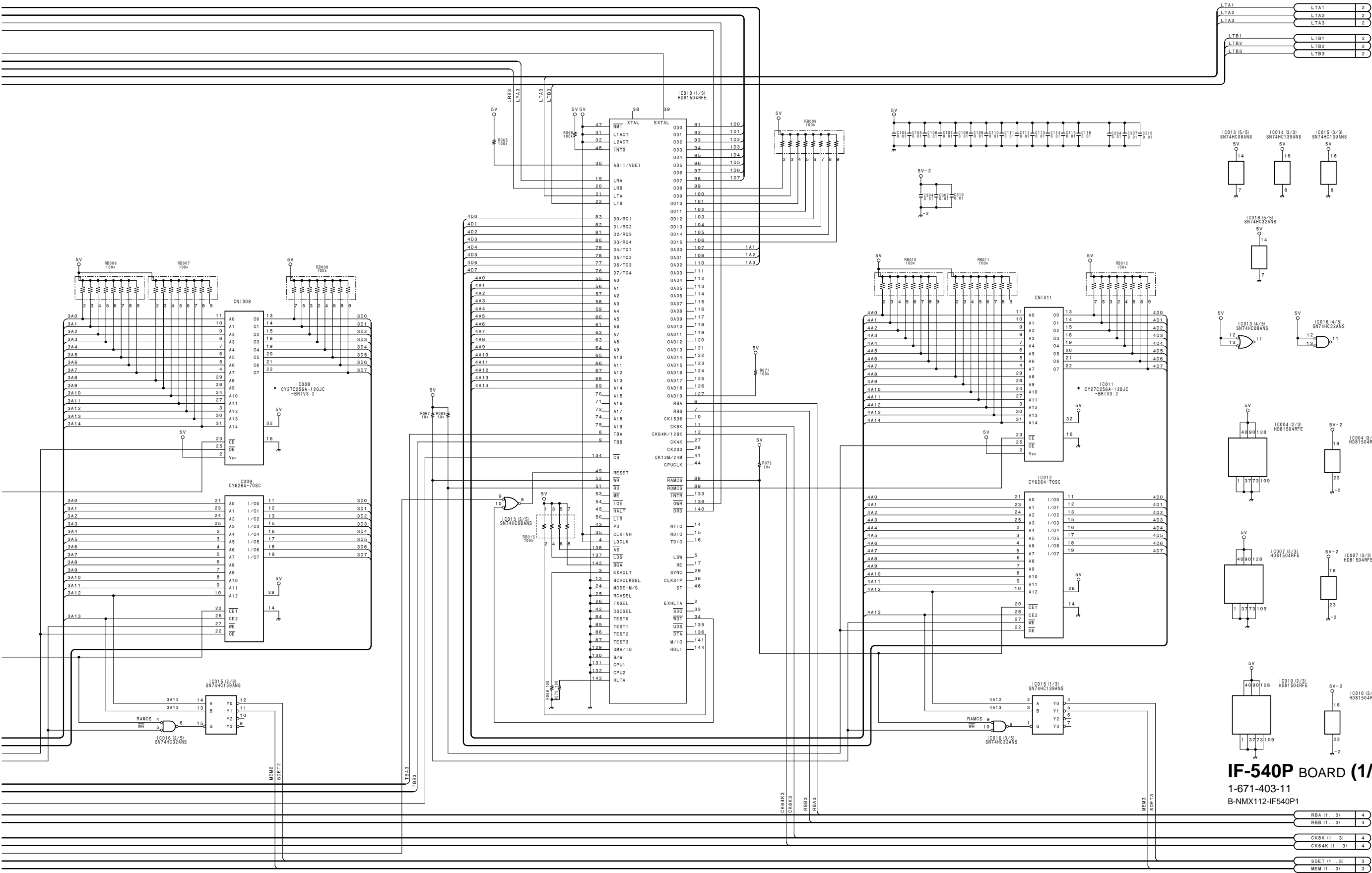
2

3

4

5

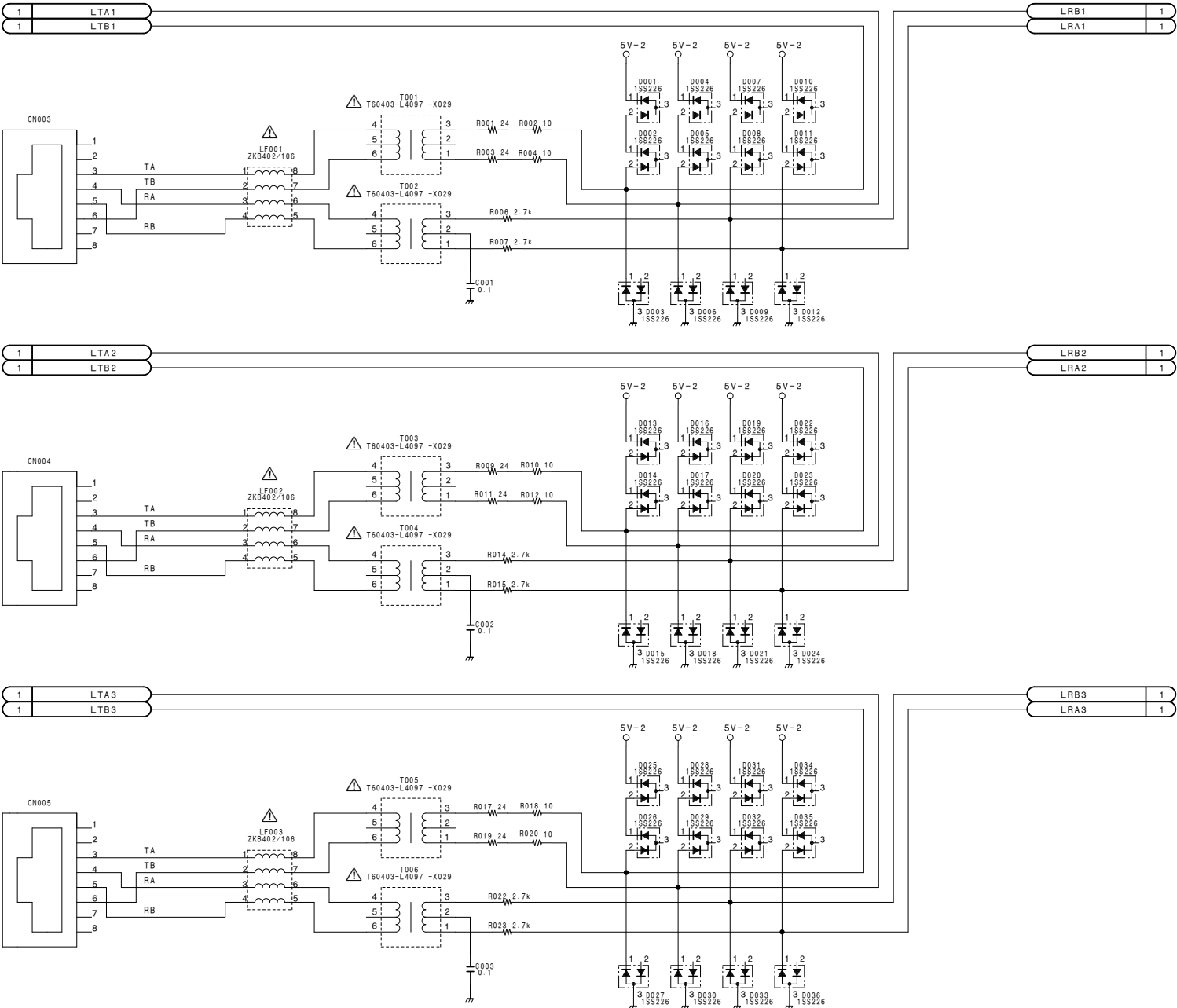




72 (PCS-5100/5100P-J, E)

IF-540P (2/5); ISDN INTERFACE

PCS-P500P (CE) ; S/N 53001 and higher

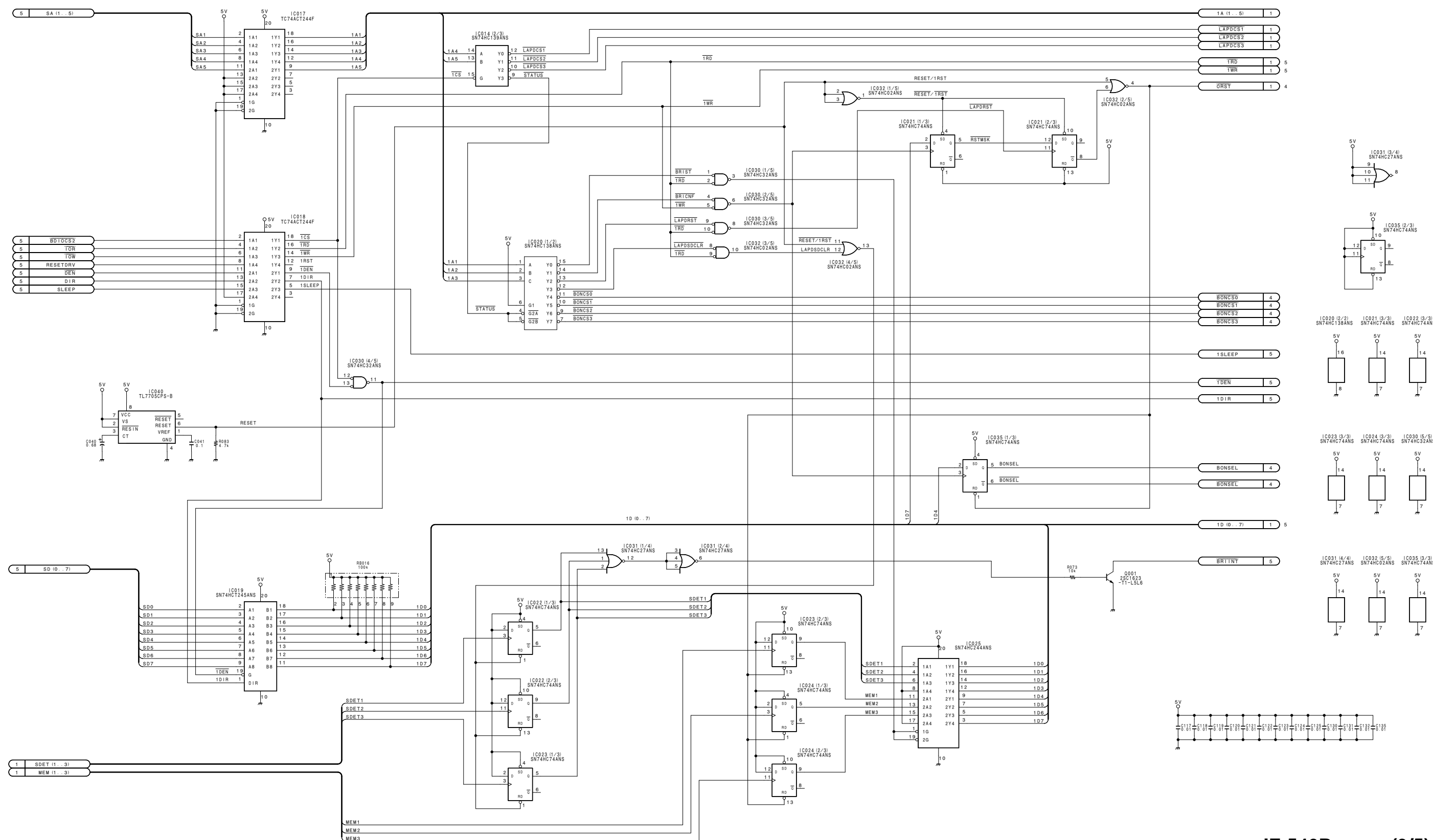


6-84 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-84 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

IF-540P (3/5); ISDN INTERFACE

PCS-P500P (CE) ; S/N 53001 and higher



6-85 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-85 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

74 (PCS-5100/5100P-J, E)

IF-540P (4/5); ISDN INTERFACE

PCS-P500P (CE) ; S/N 53001 and higher

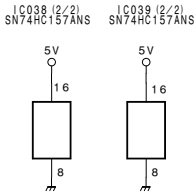
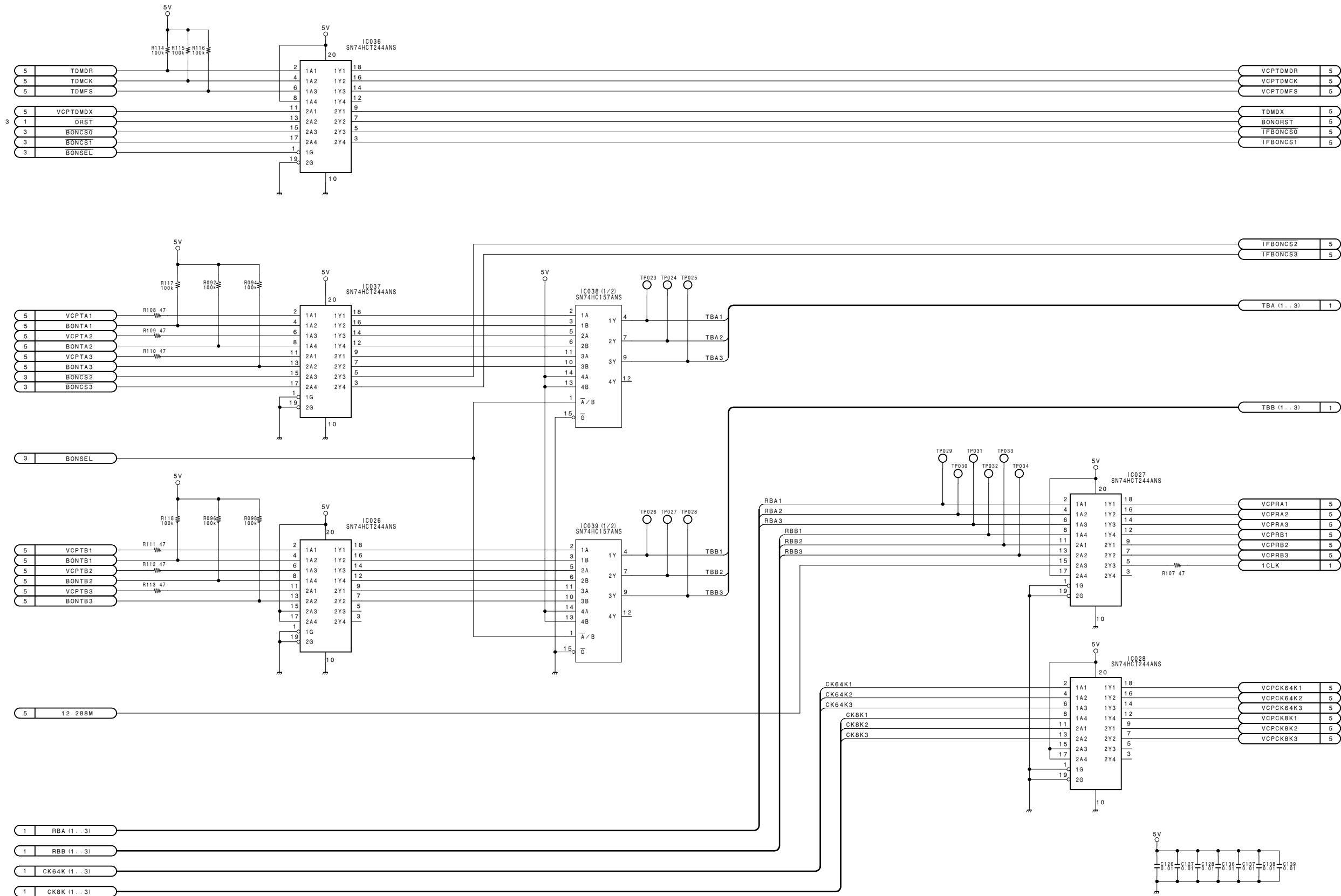
1

2

3

4

5



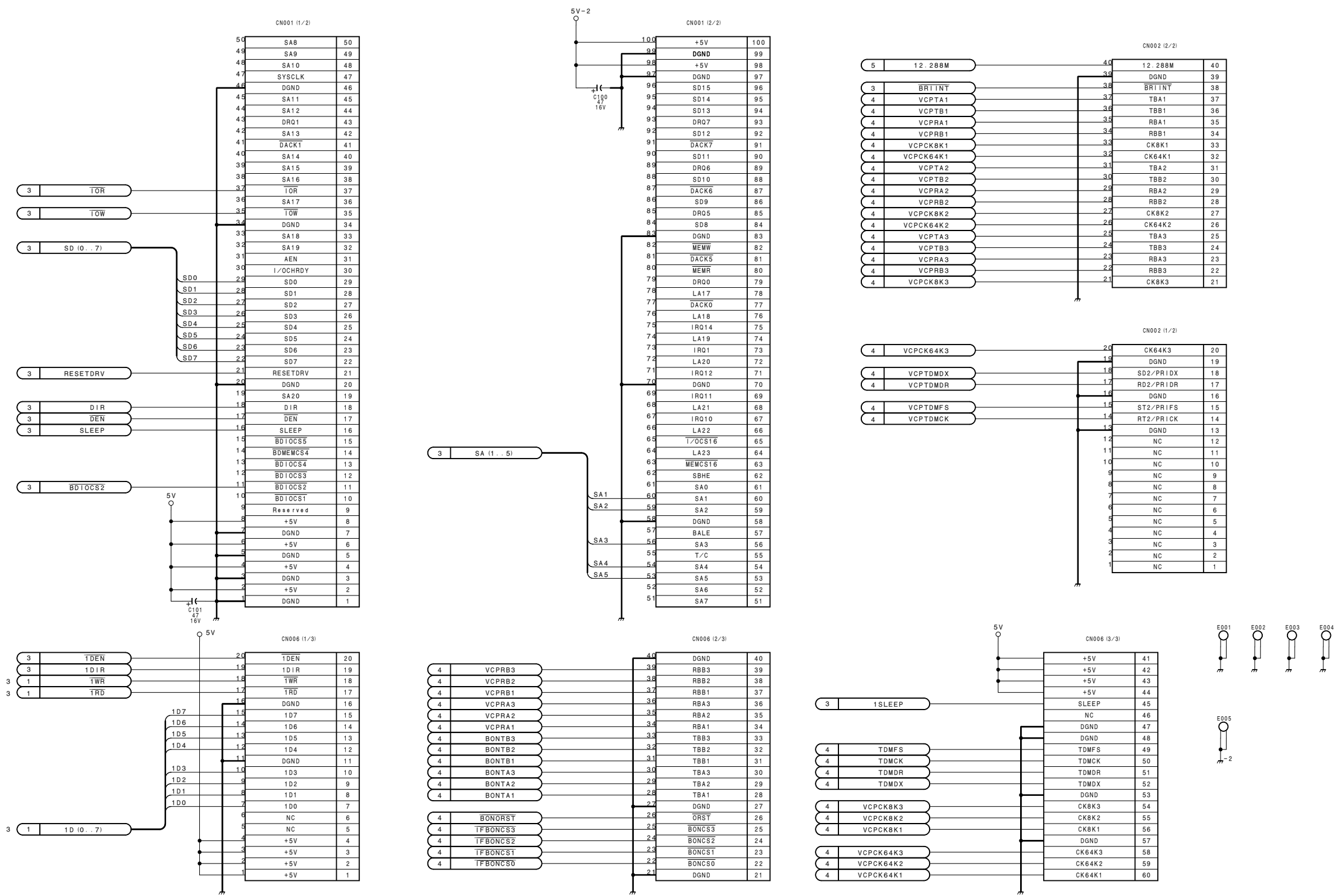
6-86 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-86 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

IF-540P BOARD (4/5)
1-671-403-11
B-NMX112-IF540P1

IF-540P (5/5); ISDN INTERFACE

PCS-P500P (CE) ; S/N 53001 and higher



6-87 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-87 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

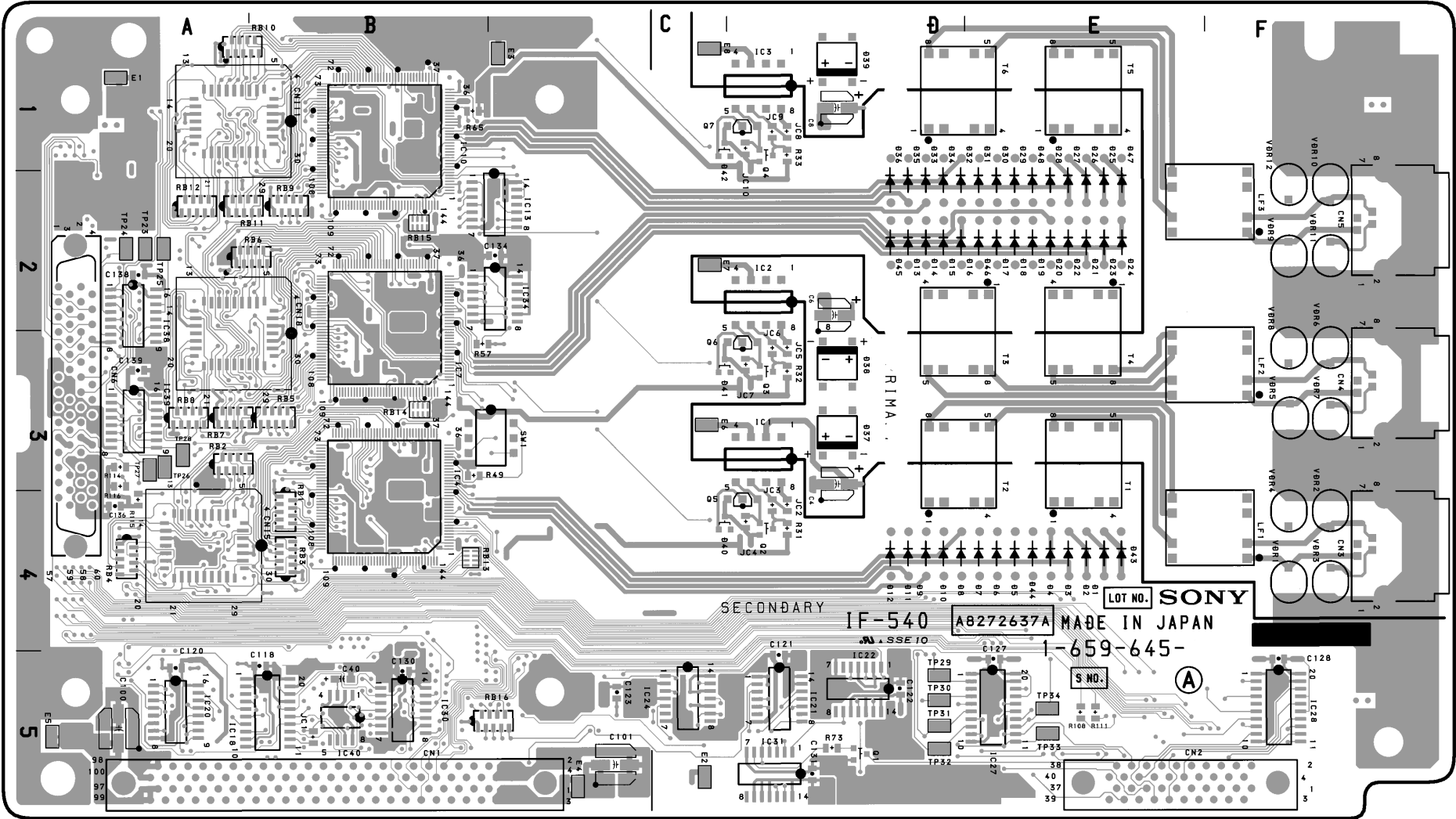
76 (PCS-5100/5100P-J, E)

IF-540/540P ; ISDN INTERFACE

IF-540 (1-659-645-11)

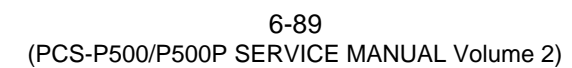
*:B SDIE

CNI5	A-4	IC1	D-3	RB14	B-3
CNI8	A-3	IC2	D-2	RB15	B-2
CNI11	A-1	IC3	D-1	RB16	C-5
		IC4	B-4		
CN1	C-5	IC6	*A-4	SW1	B-3
CN2	F-5	IC7	B-2		
CN3	F-4	IC9	*A-2	TP23	A-2
CN4	F-3	IC10	B-1	TP24	A-2
CN5	F-2	IC12	*A-1	TP25	A-2
CN6	A-2	IC13	C-2	TP26	A-3
		IC14	*A-4	TP27	A-3
D1	E-4	IC15	*A-3	TP28	A-3
D2	E-4	IC16	*A-2	TP29	D-5
D3	E-4	IC17	*A-5	TP30	D-5
D4	E-4	IC18	B-5	TP31	D-5
D5	E-4	IC19	*B-4	TP32	D-5
D6	E-4	IC20	A-5	TP33	E-5
D7	E-4	IC21	D-5	TP34	E-5
D8	D-4	IC22	D-5		
D9	D-4	IC23	*C-5	T1	E-4
D10	D-4	IC24	C-5	T2	D-4
D11	D-4	IC25	*B-5	T3	E-2
D12	D-4	IC26	*A-3	T4	E-2
D13	D-2	IC27	E-5	T5	E-1
D14	D-2	IC28	F-5	T6	D-1
D15	D-2	IC30	B-5		
D16	D-2	IC31	D-5	VDR1	F-4
D17	E-2	IC32	*B-5	VDR2	F-4
D18	E-2	IC34	C-2	VDR3	F-4
D19	E-2	IC35	*A-2	VDR4	F-4
D20	E-2	IC36	*A-4	VDR5	F-3
D21	E-2	IC37	*A-2	VDR6	F-3
D22	E-2	IC38	A-2	VDR7	F-3
D23	E-2	IC39	A-3	VDR8	F-3
D24	E-2	IC40	B-5	VDR9	F-2
D25	E-2			VDR10	F-2
D26	E-2	JC3	D-4	VDR11	F-2
D27	E-2	JC6	D-3	VDR12	F-2
D28	E-2	JC9	D-1		
D29	E-2	JC11	*C-4		
D30	E-2	JC12	*C-3		
D31	E-2	JC13	*C-1		
D32	D-2				
D33	D-2	LF1	F-4		
D34	D-2	LF2	F-3		
D35	D-2	LF3	F-2		
D36	D-2				
D37	D-3	Q1	D-5		
D38	D-3	Q2	D-4		
D39	D-1	Q3	D-3		
D43	E-4	Q4	D-1		
D44	E-4				
D45	D-2	RB1	B-4		
D46	E-2	RB2	A-3		
D47	E-2	RB3	B-4		
D48	E-2	RB4	A-4		
		RB5	B-3		
E1	A-1	RB6	B-2		
E2	C-5	RB7	A-3		
E3	C-1	RB8	A-3		
E4	C-5	RB9	B-2		
E5	A-5	RB10	A-1		
E6	C-3	RB11	A-2		
E7	C-2	RB12	A-2		
E8	C-1	RB13	B-4		

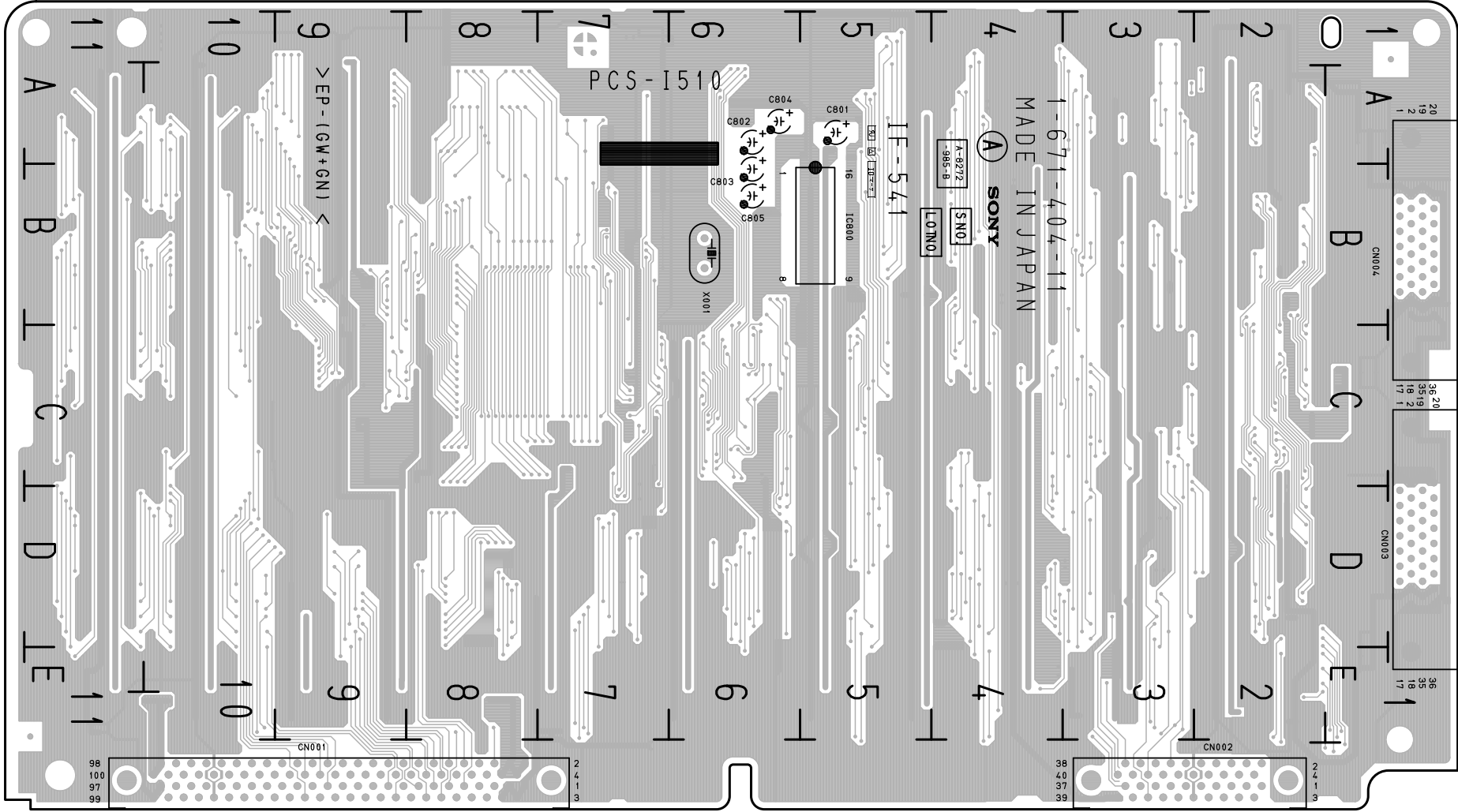


IF-540/540P -A SIDE-
1-659-645-11/21
PCS-P500/P500P ; #10001-

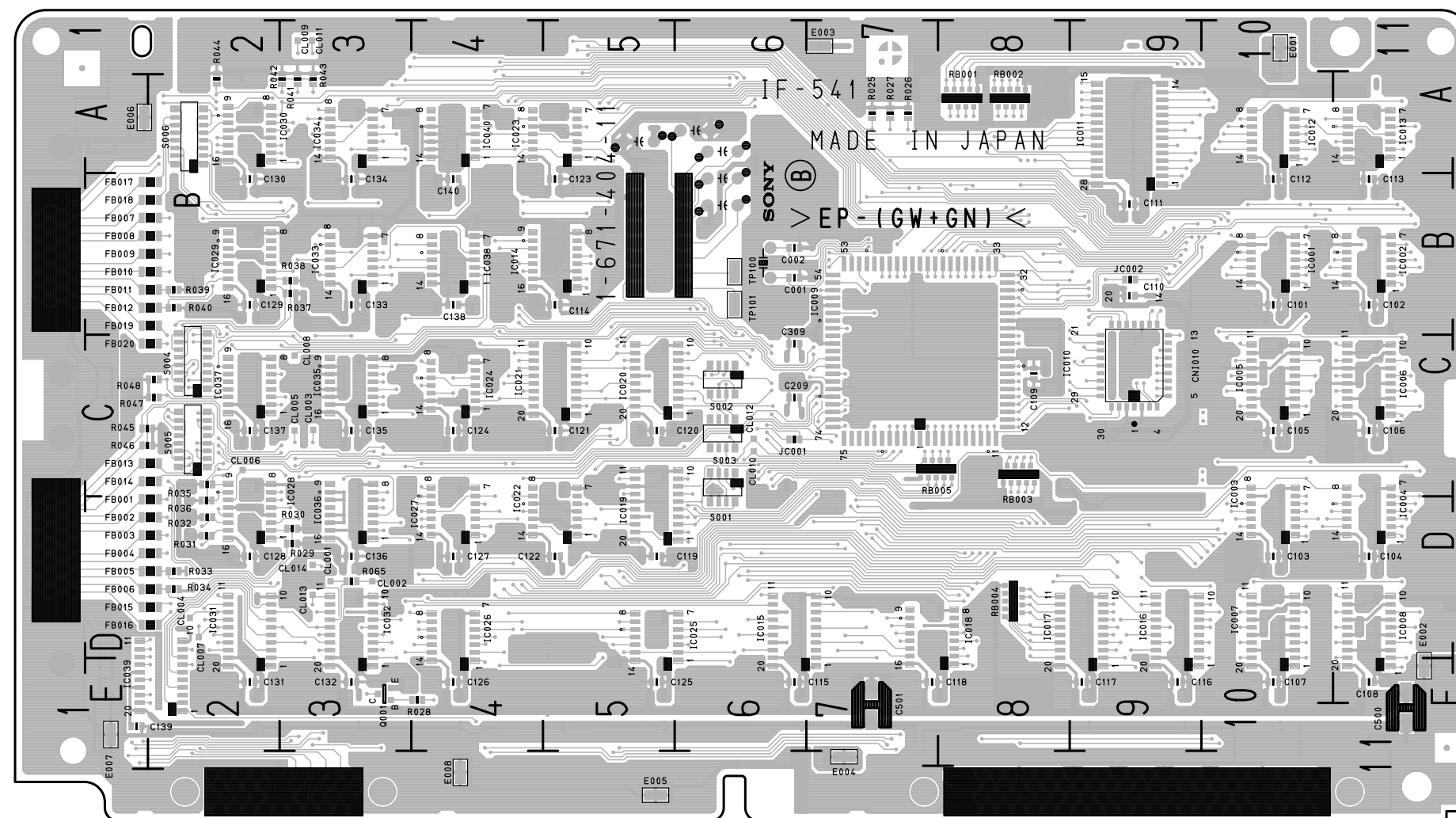
1-659-645-11/21
PCS-P500/P500P ; #10001-



PCS-I510 (J) : SN 33001 and higher
PCS-I510 (UC) : SN 13001 and higher
PCS-I510 (CE) : SN 43001 and higher



IF-541 -A SIDE-
SUFFIX: -11

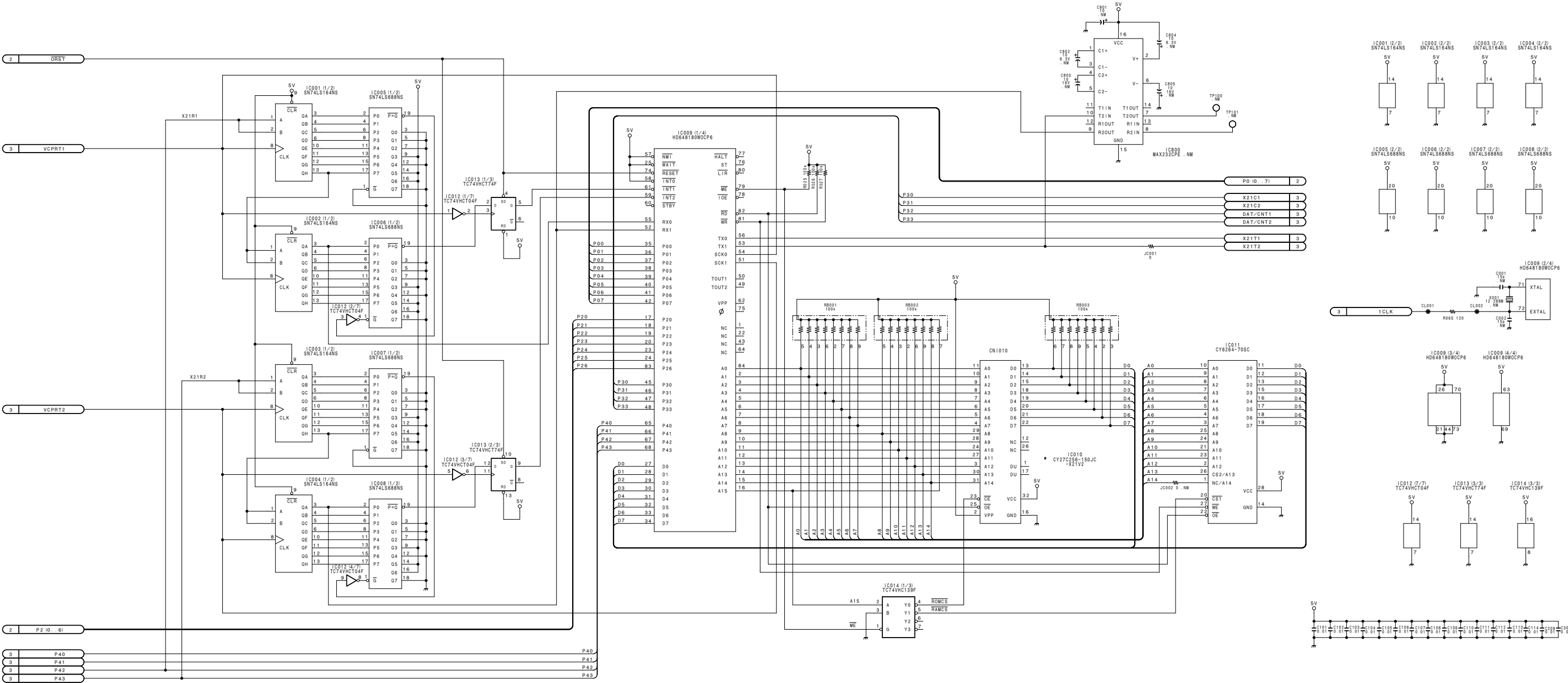


IF-541 -B SIDE-
SUFFIX: -11

80 (PCS-5100/5100P-J, E)

IF-541 (1/4); X.21 INTERFACE

PCS-I510 (J) ; S/N 33001 and higher
PCS-I510 (UC) ; S/N 13001 and higher
PCS-I510 (CE) ; S/N 43001 and higher



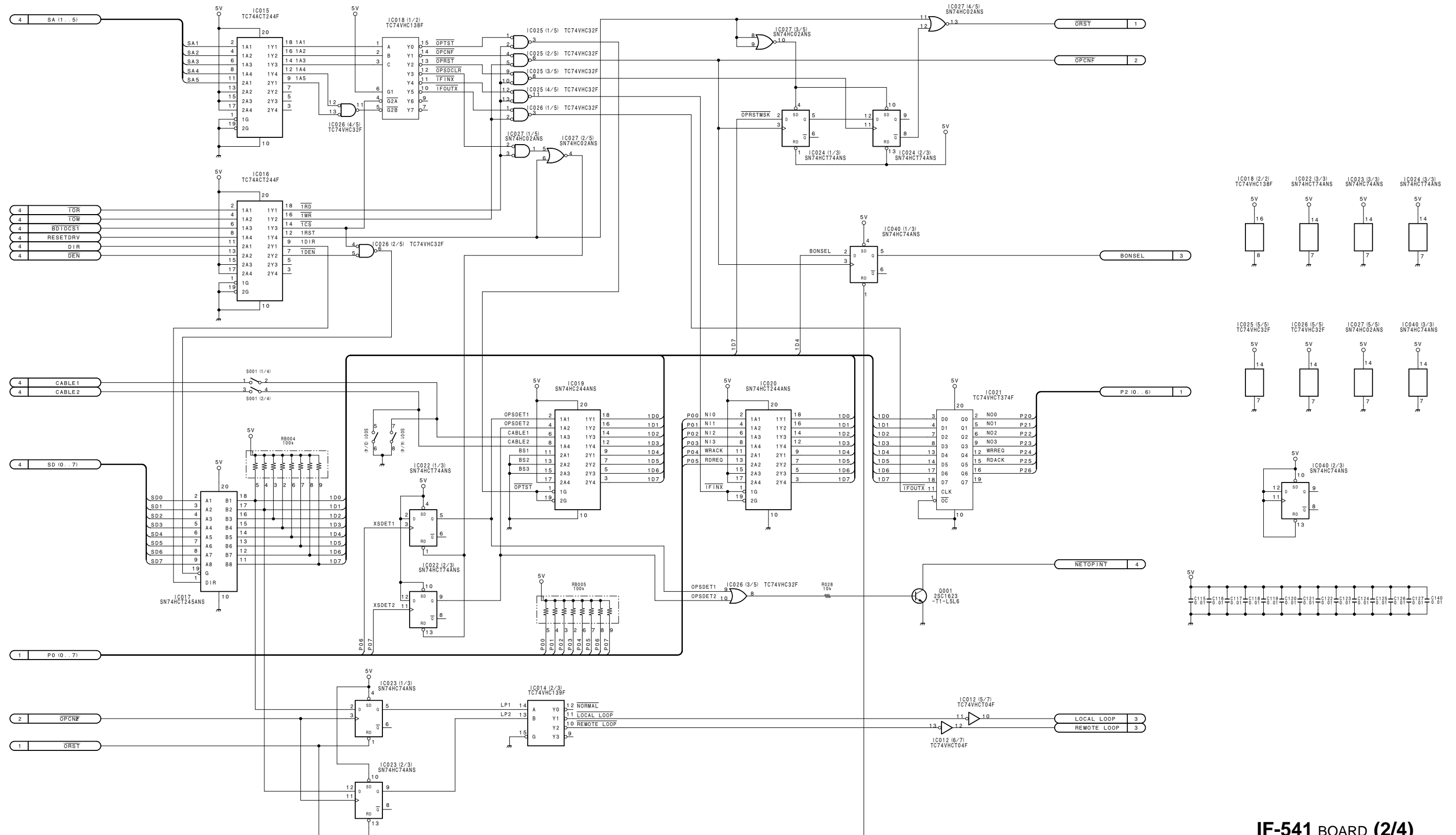
IF-541 BOARD (1/4)

1-671-404-11

B-NMX112-IF541NEW

IF-541 (2/4); X.21 INTERFACE

PCS-I510 (J) ; S/N 33001 and higher
PCS-I510 (UC) ; S/N 13001 and higher
PCS-I510 (CE) ; S/N 43001 and higher

**IF-541 BOARD (2/4)**

1-671-404-11
B-NMX112-IF541NEW

82 (PCS-5100/5100P-J, E)

IF-541 (3/4); X.21 INTERFACE

PCS-I510 (J) ; S/N 33001 and higher
PCS-I510 (UC) ; S/N 13001 and higher
PCS-I510 (CE) ; S/N 43001 and higher

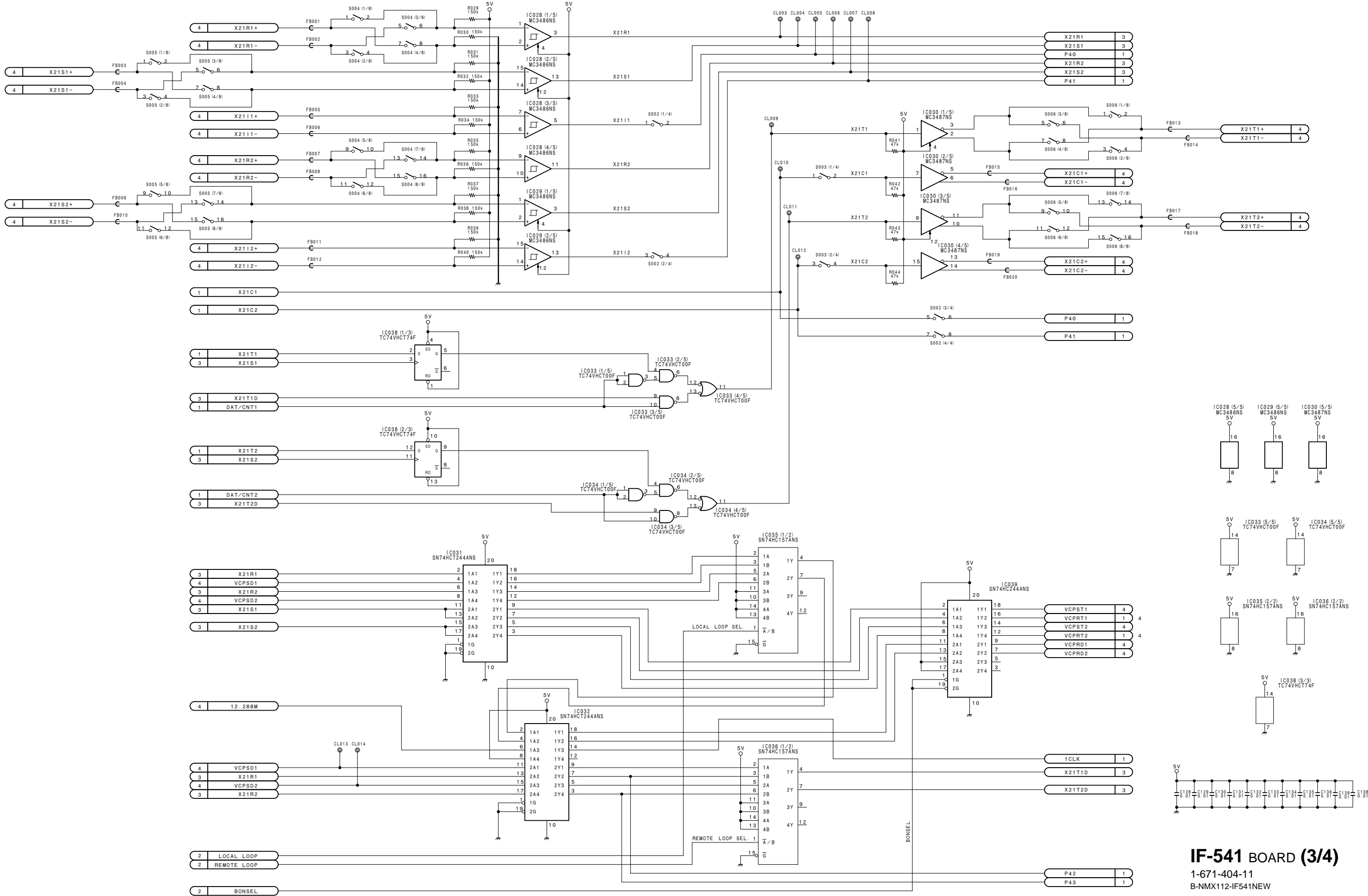
1

2

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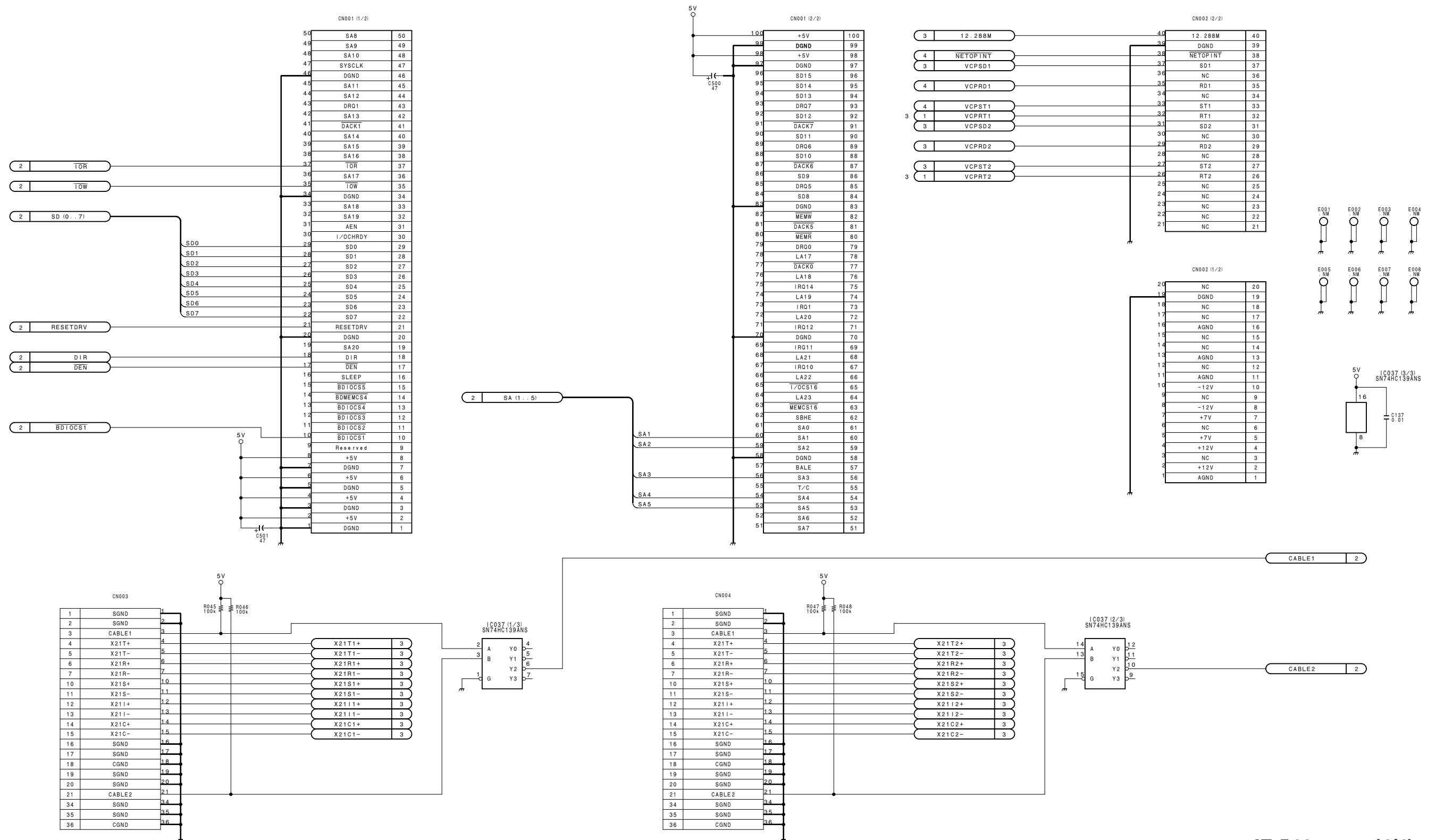
5



IF-541 (4/4); X.21 INTERFACE

PCS-I510 (J) ; S/N 33001 and higher
PCS-I510 (UC) ; S/N 13001 and higher
PCS-I510 (CE) ; S/N 43001 and higher

(PCS-5100/5100P-J, E) 83



IF-541 ; X.21 INTERFACE

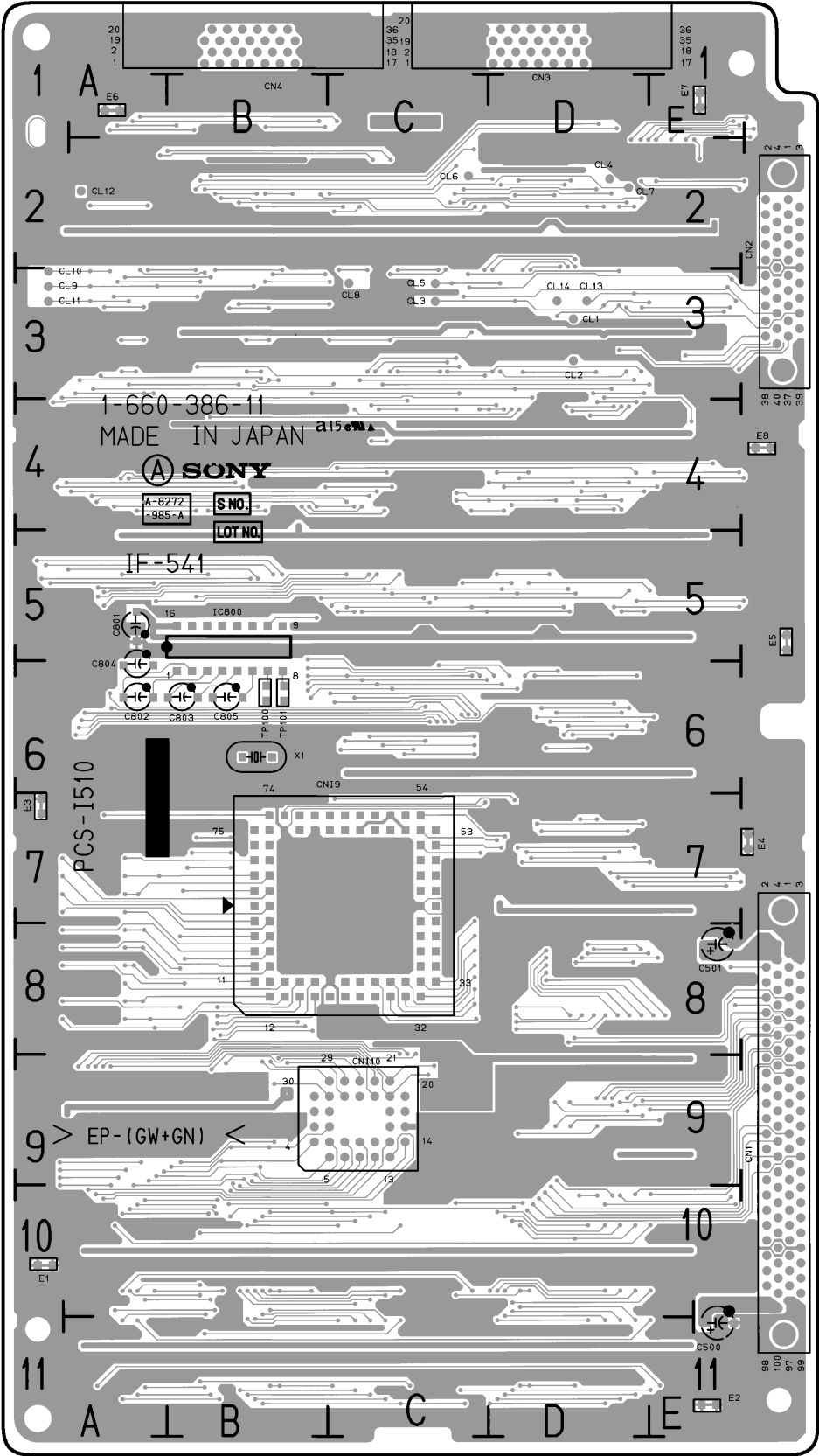
IF-541 (1-660-386-11)

*:B SDIE

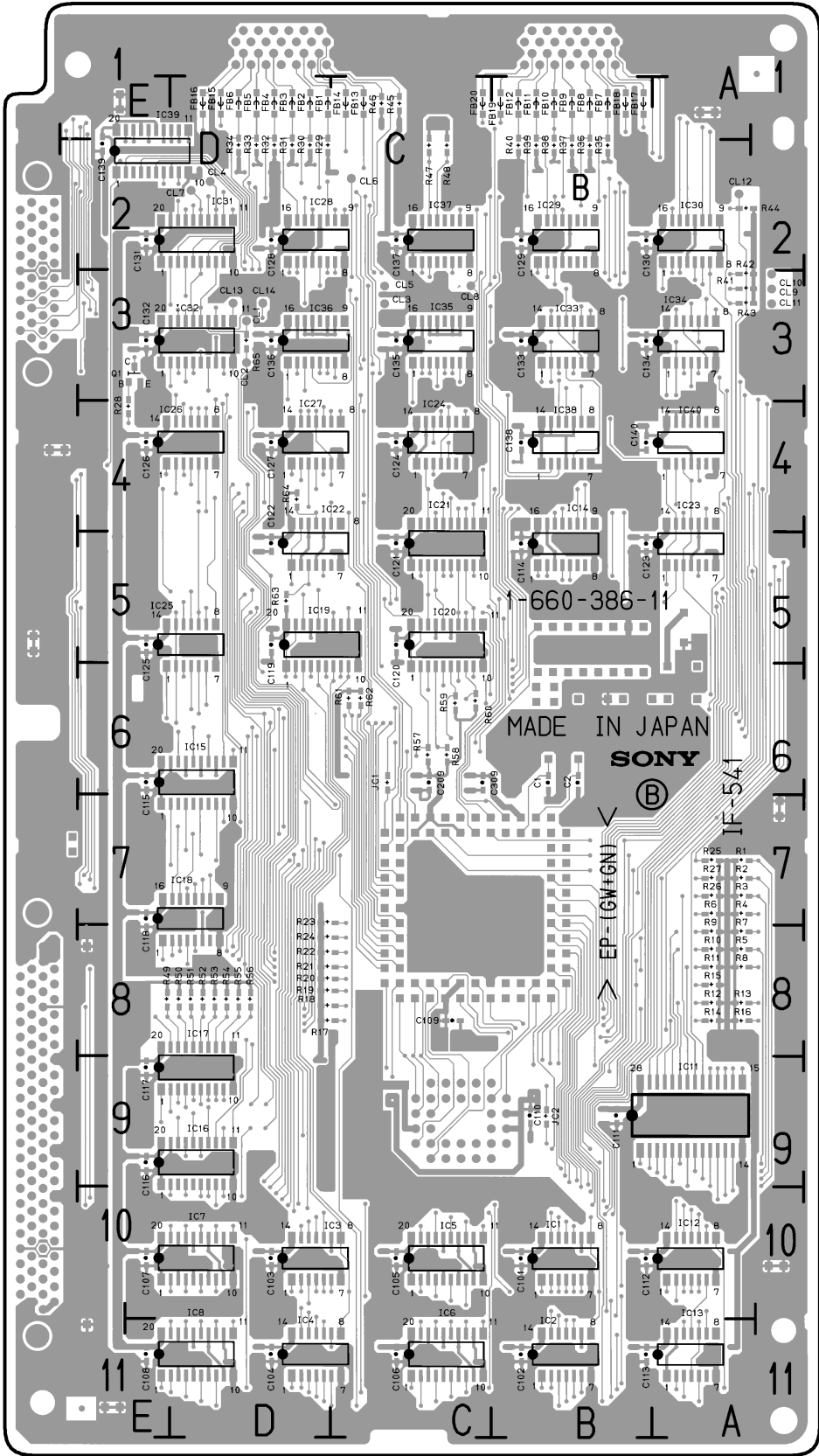
CNI9	B-7	IC38	*B-4
CNI10	C-9	IC39	*E-2
		IC40	*A-4
CN1	E-8	JC1	*C-6
CN2	E-2		
CN3	D-1	Q1	*E-3
CN4	B-1		

FB1	*D-1
FB2	*D-1
FB3	*D-1
FB4	*D-1
FB5	*D-1
FB6	*D-1
FB7	*B-1
FB8	*B-1
FB9	*B-1
FB10	*B-1
FB11	*B-1
FB12	*B-1
FB13	*C-1
FB14	*C-1
FB15	*D-1
FB16	*D-1
FB17	*B-1
FB18	*B-1
FB19	*B-1
FB20	*C-1

IC1	*B-10
IC2	*B-11
IC3	*D-10
IC4	*D-11
IC5	*C-10
IC6	*C-11
IC7	*D-10
IC8	*D-11
IC9	B-7
IC11	*A-9
IC12	*A-10
IC13	*A-11
IC14	*B-5
IC15	*D-6
IC16	*D-9
IC17	*D-9
IC18	*D-7
IC19	*D-5
IC20	*C-5
IC21	*C-5
IC22	*D-5
IC23	*A-5
IC24	*C-4
IC25	*D-5
IC26	*D-4
IC27	*D-4
IC28	*D-2
IC29	*B-2
IC30	*A-2
IC31	*D-2
IC32	*D-3
IC33	*B-3
IC34	*A-3
IC35	*C-3
IC36	*D-3
IC37	*C-2



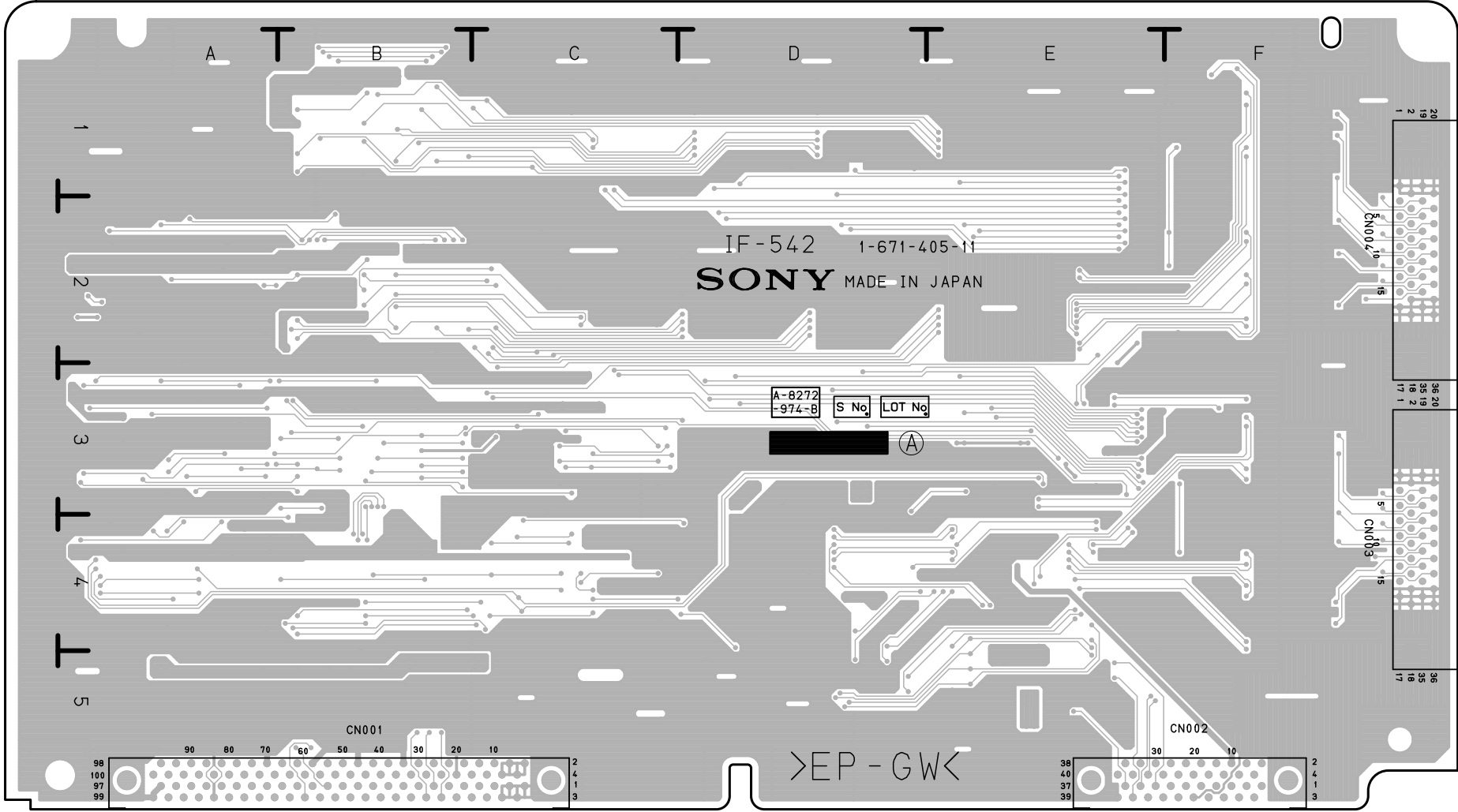
IF-541 -A SIDE-
1-660-386-11
PCS-I510 ; #10001-



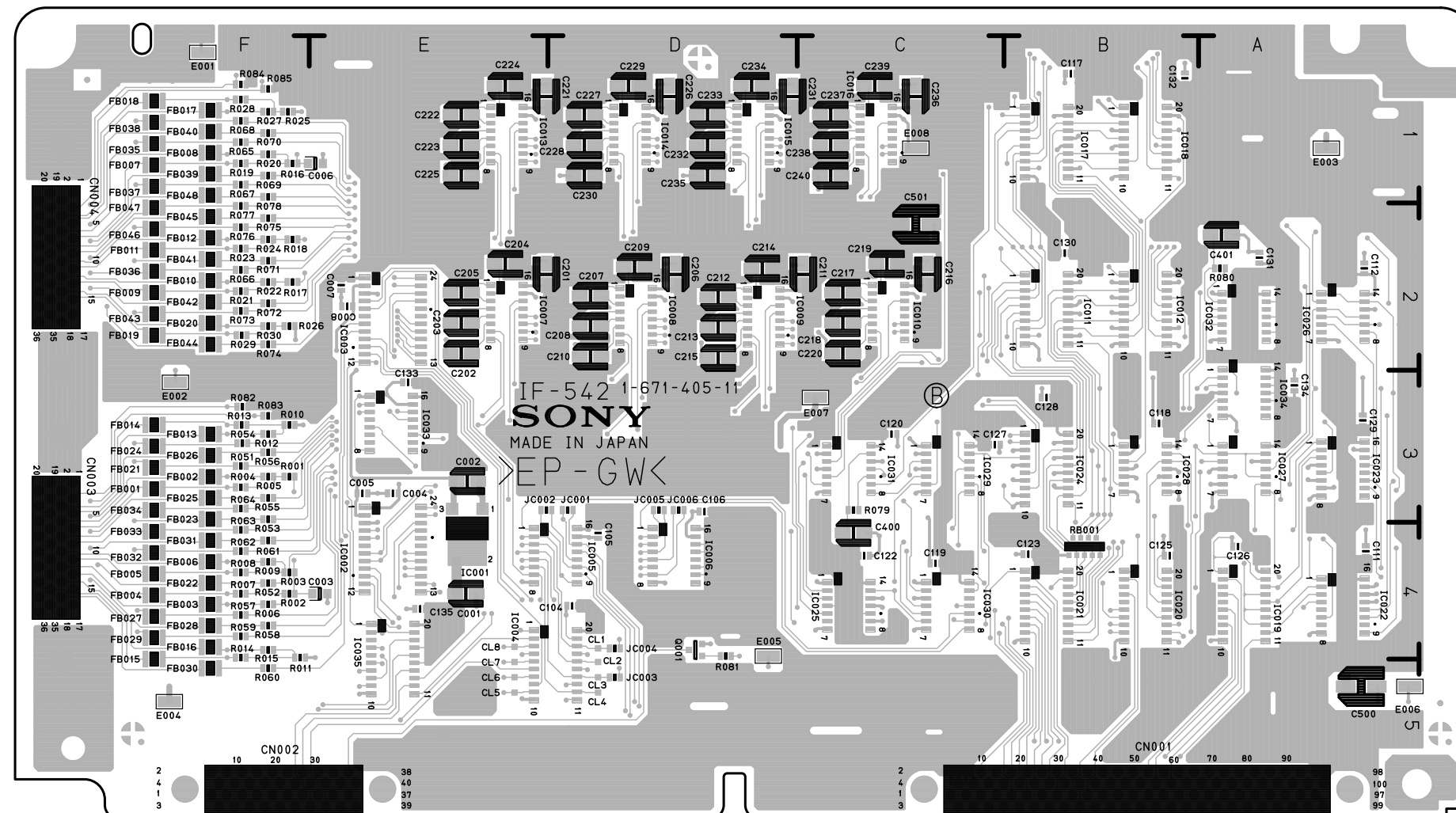
IF-541 -B SIDE-
1-660-386-11
PCS-I510 ; #10001-

A	B	C	D	E	F	G	H
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9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72
73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88
89	90	91	92	93	94	95	96
97	98	99	100	101	102	103	104
105	106	107	108	109	110	111	112
113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128
129	130	131	132	133	134	135	136
137	138	139	140	141	142	143	144
145	146	147	148	149	150	151	152
153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168
169	170	171	172	173	174	175	176
177	178	179	180	181	182	183	184
185	186	187	188	189	190	191	192
193	194	195	196	197	198	199	200
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353	354	355	356	357	358	359	360
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377	378	379	380	381	382	383	384
385	386	387	388	389	390	391	392
393	394	395	396	397	398	399	400
401	402	403	404	405	406	407	408
409	410	411	412	413	414	415	416
417	418	41					

PCS-I500 (J) : SN 33001 and higher
PCS-I500 (UC) : SN 13001 and higher
PCS-I500 (CE) : SN 43001 and higher



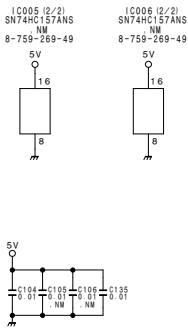
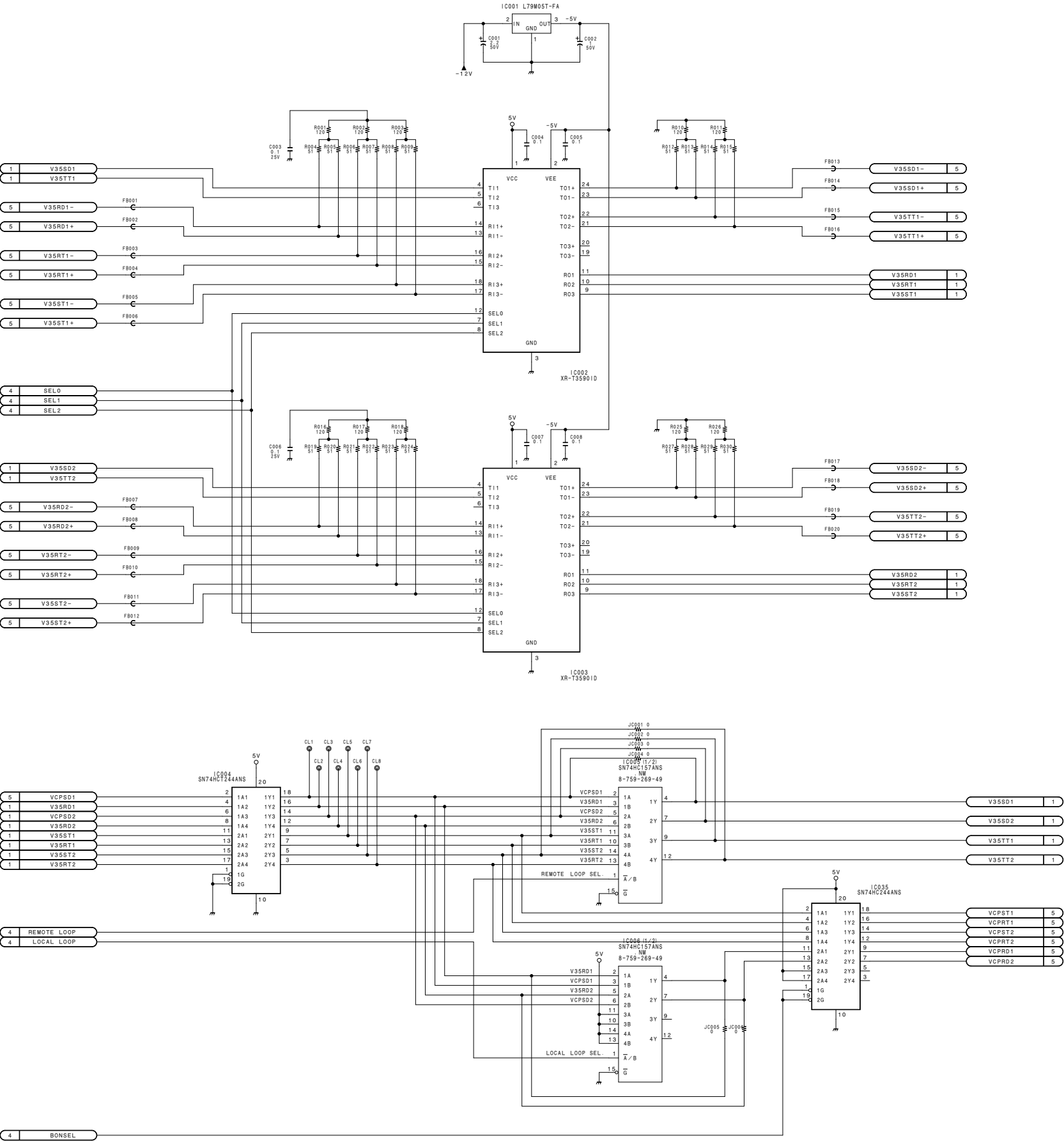
IF-542 -A SIDE-
SUFFIX: -11



IF-542 -B SIDE-
SUFFIX: -11

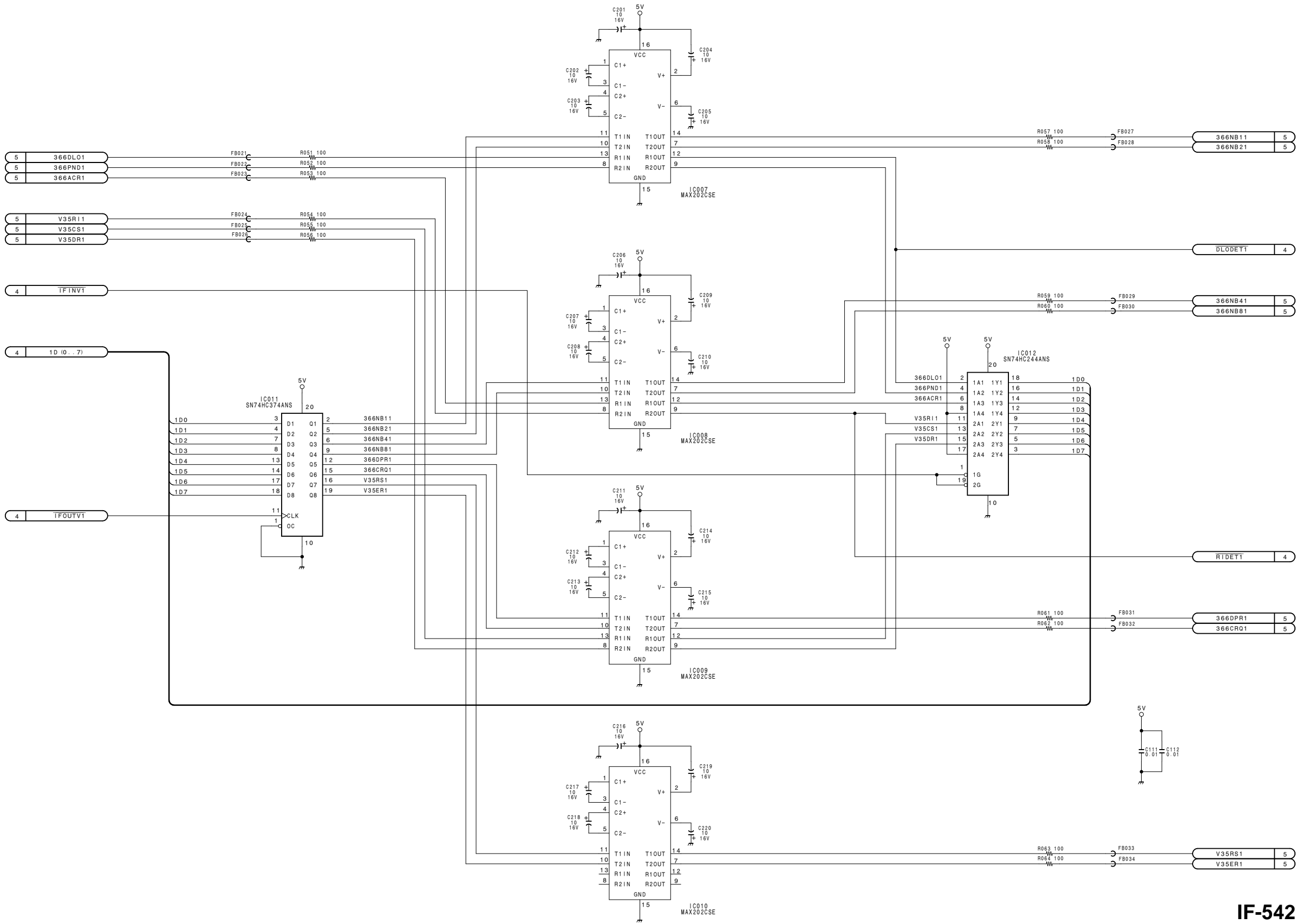
88 (PCS-5100/5100P-J, E)
IF-542 (1/5); V.35 INTERFACE

PCS-I500 (J) ; S/N 33001 and higher
PCS-I500 (UC) ; S/N 13001 and higher
PCS-I500 (CE) ; S/N 43001 and higher



IF-542 (2/5); V.35 INTERFACE

PCS-I500 (J) ; S/N 33001 and higher
PCS-I500 (UC) ; S/N 13001 and higher
PCS-I500 (CE) ; S/N 43001 and higher



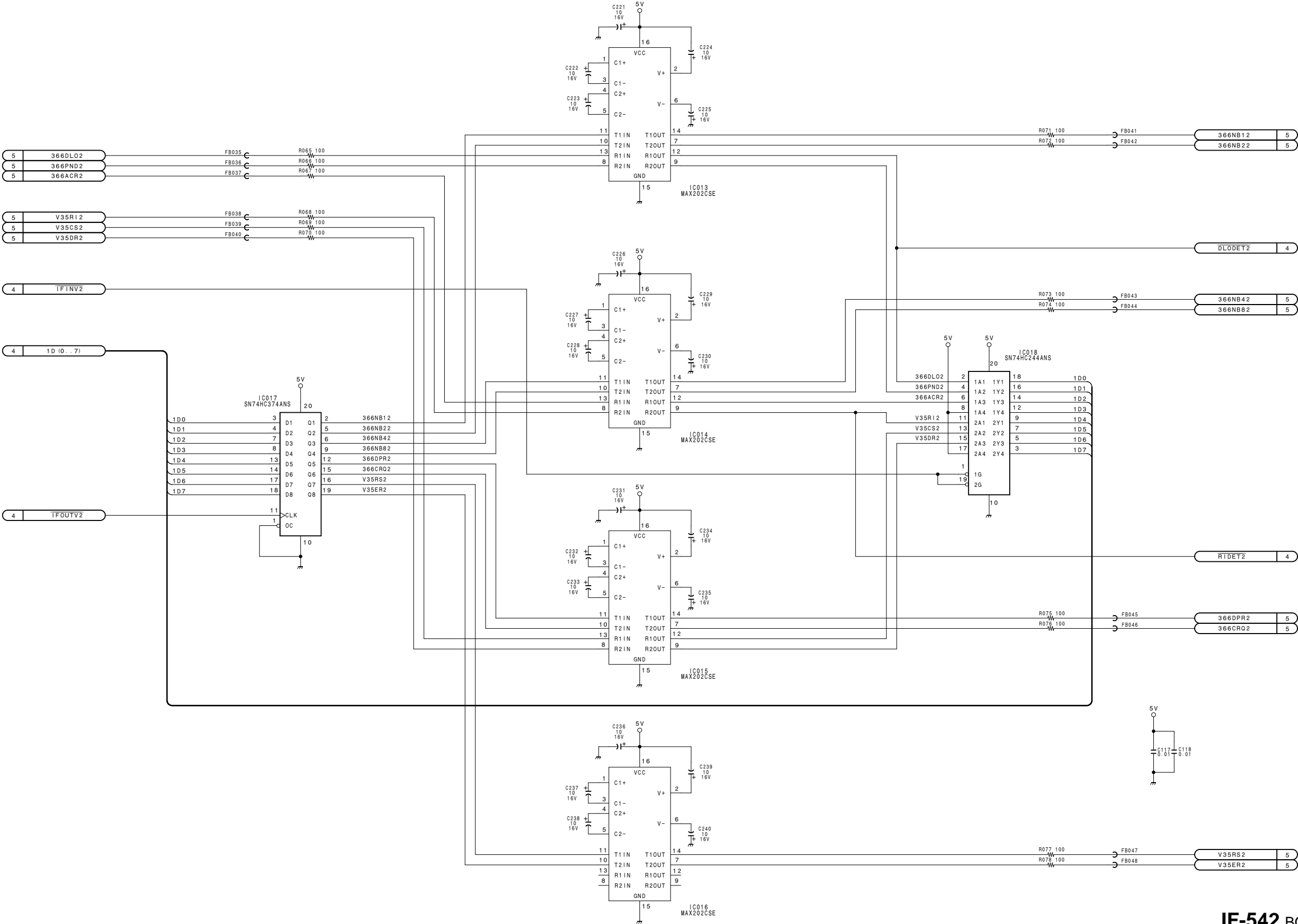
6-101 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-101 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

90 (PCS-5100/5100P-J, E)

IF-542 (3/5); V.35 INTERFACE

PCS-I500 (J) ; S/N 33001 and higher
PCS-I500 (UC) ; S/N 13001 and higher
PCS-I500 (CE) ; S/N 43001 and higher



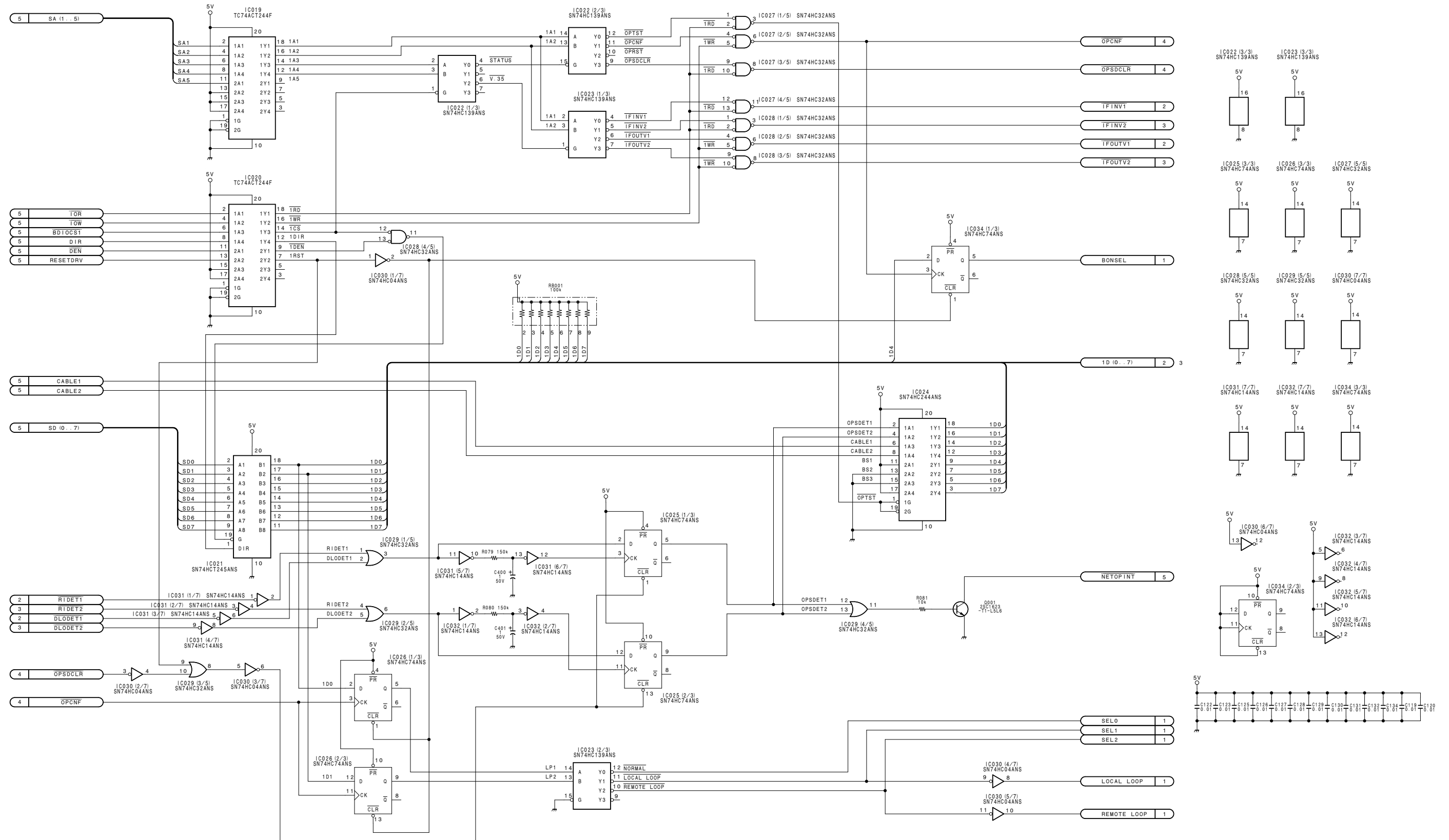
6-102 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-102 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

IF-542 BOARD (3/5)
1-671-405-11
B-NMX112-IF542NEW2

IF-542 (4/5); V.35 INTERFACE

PCS-I500 (J) ; S/N 33001 and higher
PCS-I500 (UC) ; S/N 13001 and higher
PCS-I500 (CE) ; S/N 43001 and higher



6-103 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-103 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

IF-542 BOARD (4/5)
1-671-405-11
B-NMX112-IF542NEW2

92 (PCS-5100/5100P-J, E)
IF-542 (5/5); V.35 INTERFACE

PCS-I500 (J) ; S/N 33001 and higher
PCS-I500 (UC) ; S/N 13001 and higher
PCS-I500 (CE) ; S/N 43001 and higher

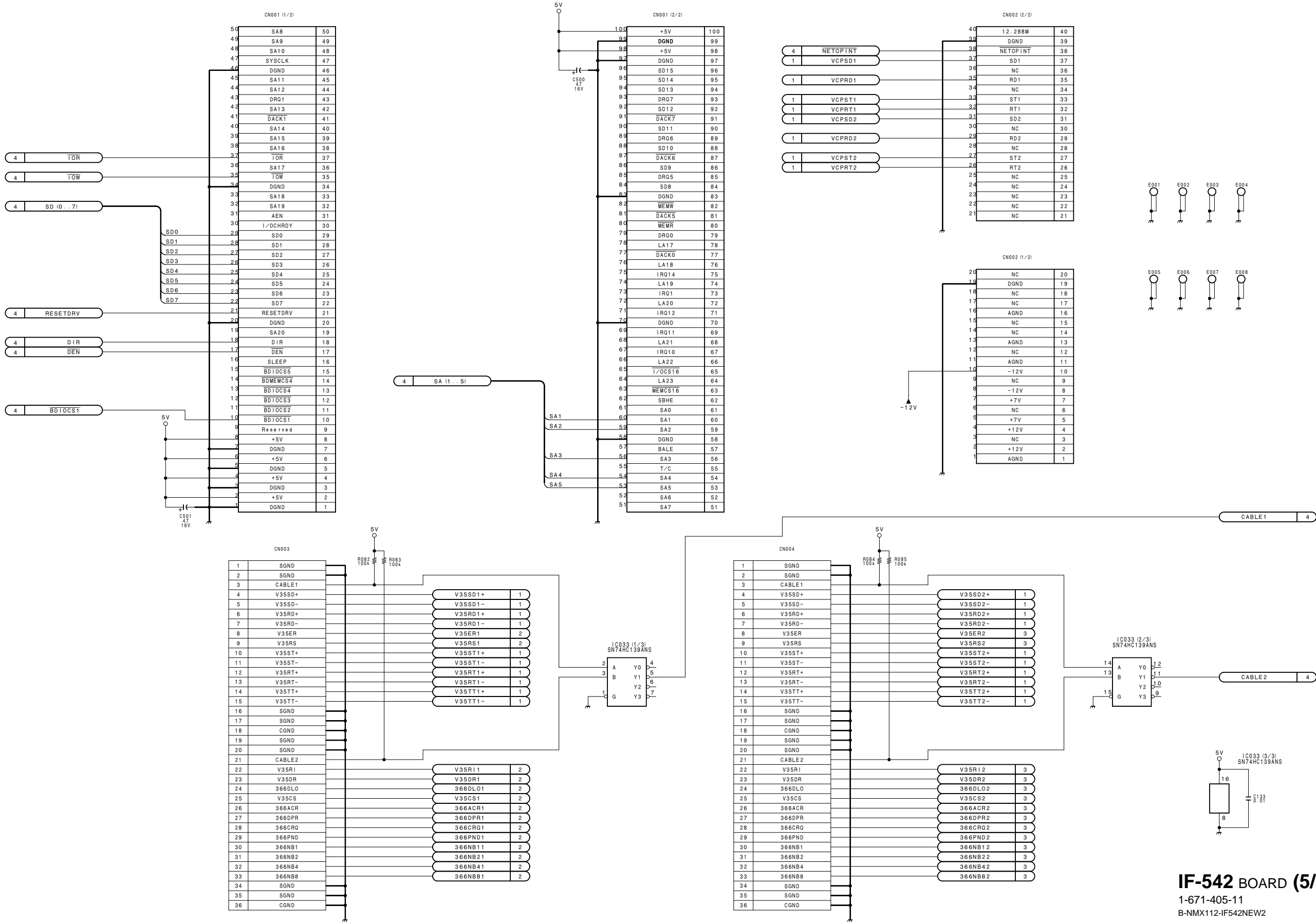
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6-104 (a) (PCS-P500/P500P SERVICE MANUAL Volume 2)

IF-542 BOARD (5/5)
1-671-405-11
B-NMX112-IF542NEW2

A

B

C

D

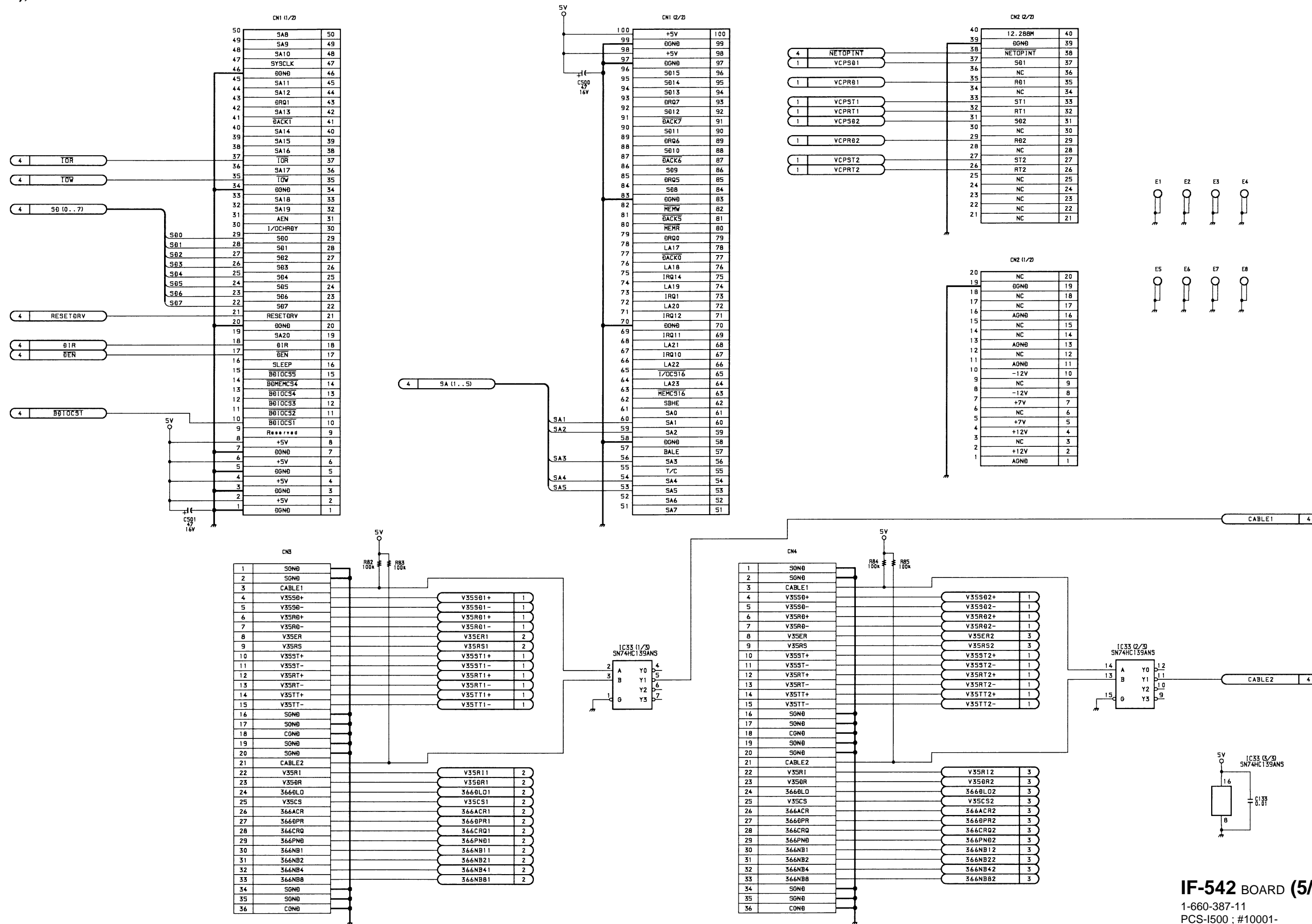
E

F

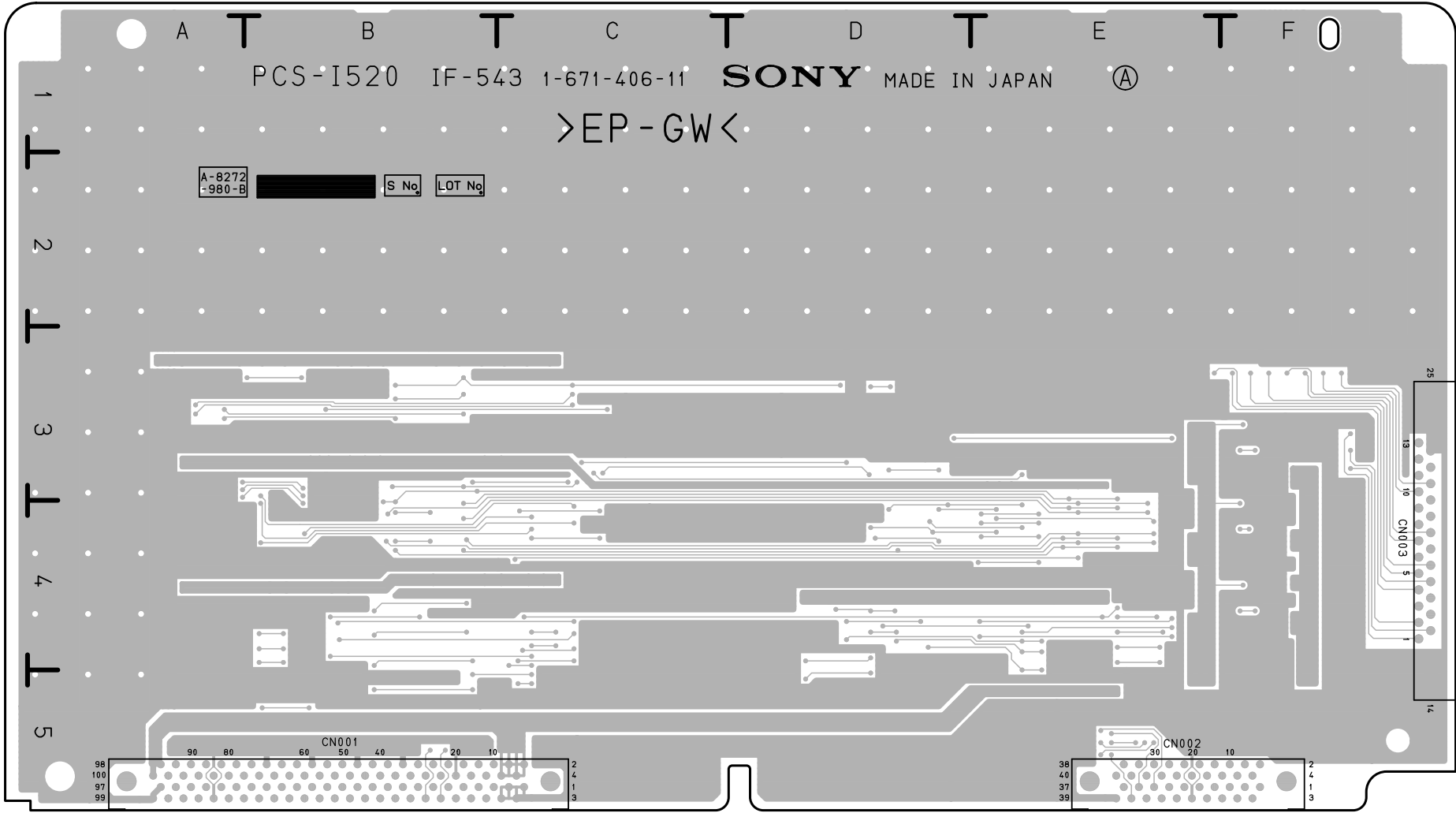
G

H

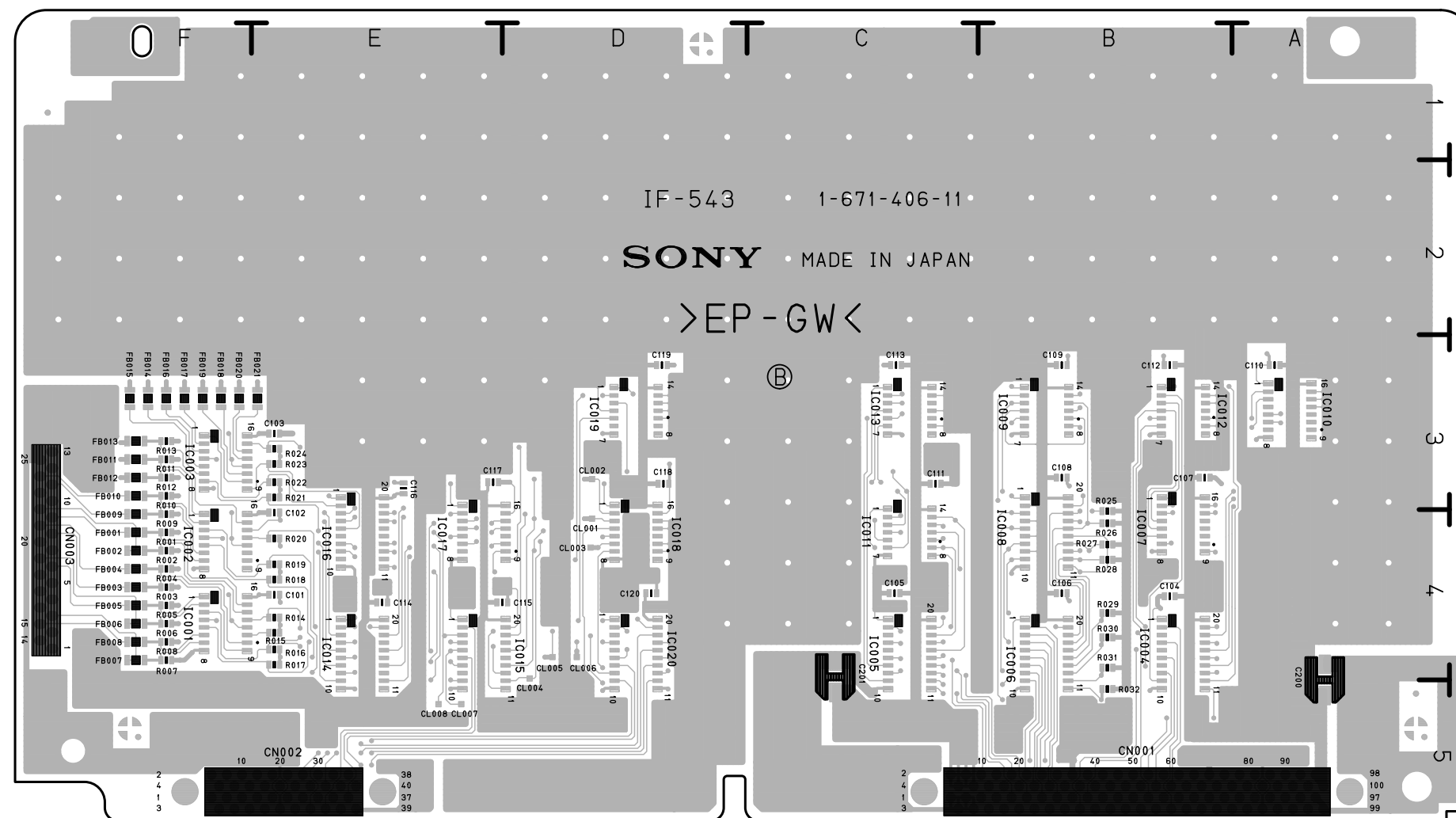
IF-542 (5/5); V.35 INTERFACE



PCS-I520 (J) : SN 33001 and higher
PCS-I520 (UC) : SN 13001 and higher
PCS-I520 (CE) : SN 43001 and higher



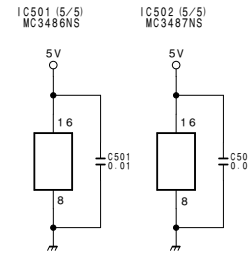
IF-543 -A SIDE-
SUFFIX: -11



IF-543 -B SIDE-
SUFFIX: -11

IF-543 (1/4); RS-449 INTERFACE

PCS-I520 (J) ;	S/N 33001 and higher
PCS-I520 (UC) ;	S/N 13001 and higher
PCS-I520 (CE) ;	S/N 43001 and higher



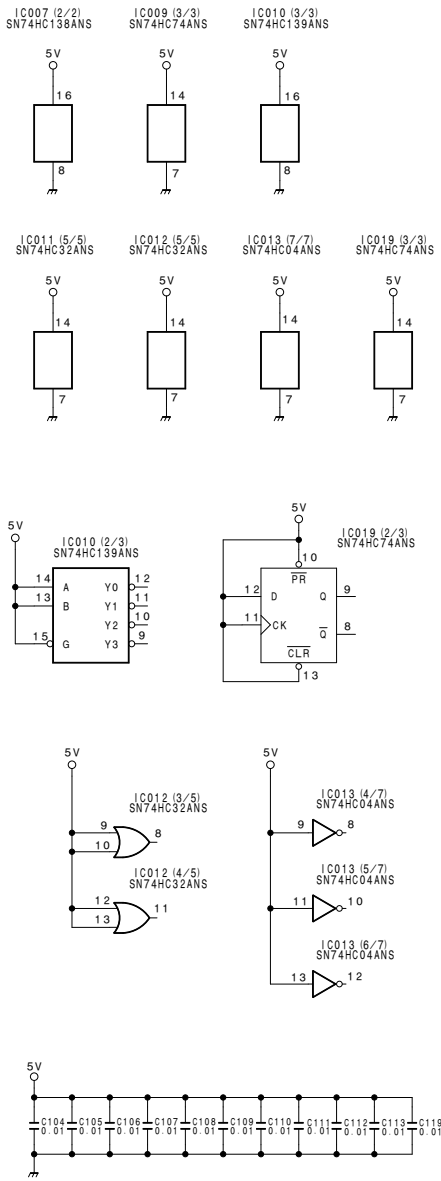
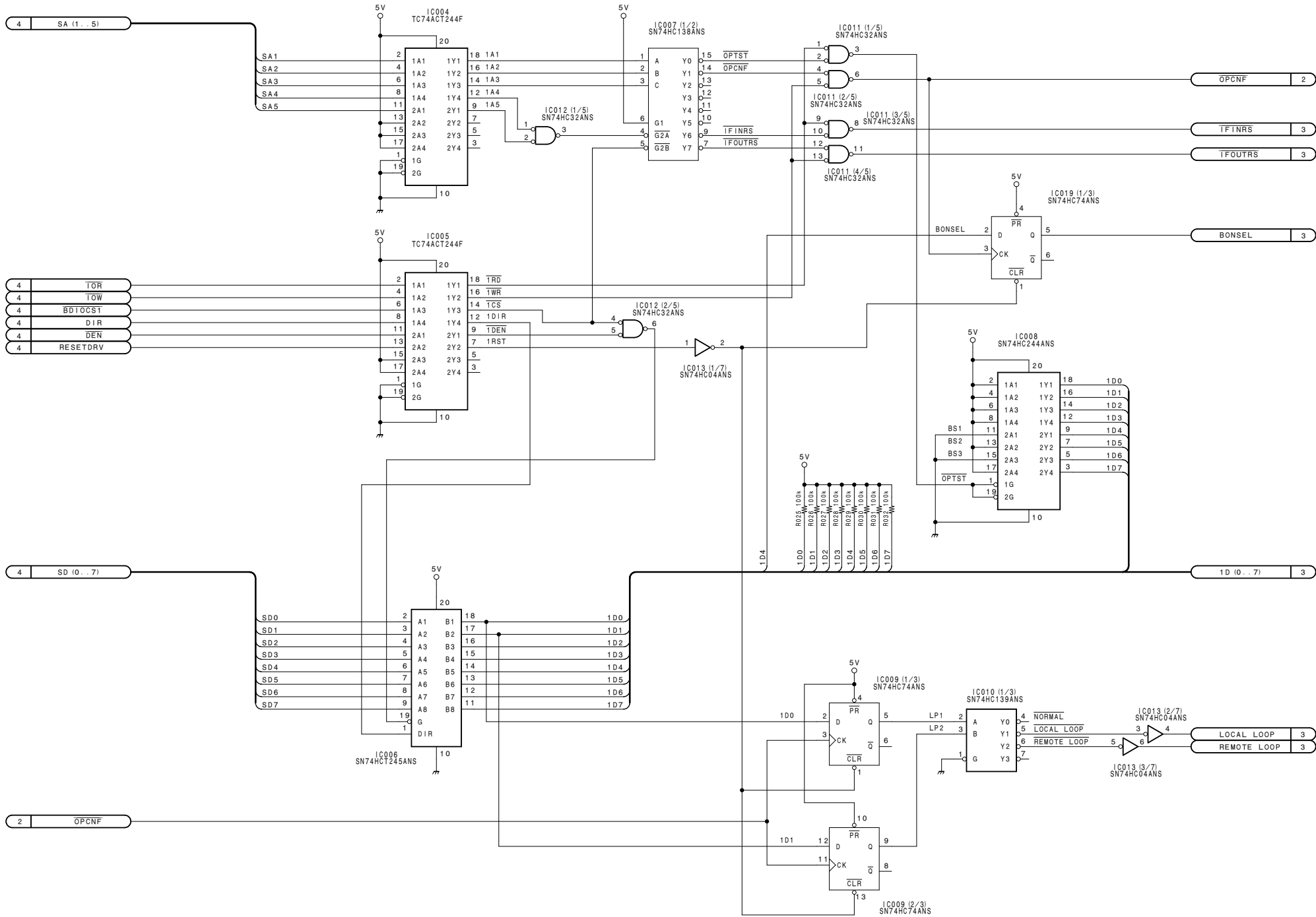
6-110 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-110 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

IF-543 BOARD (1/4)
1-671-406-11
B-NMA038-IF543

IF-543 (2/4); RS-449 INTERFACE

PCS-I520 (J) ; S/N 33001 and higher
PCS-I520 (UC) ; S/N 13001 and higher
PCS-I520 (CE) ; S/N 43001 and higher



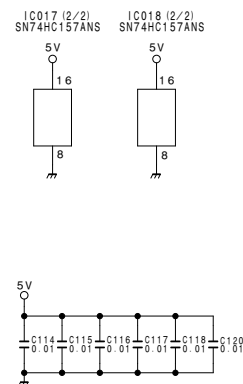
6-111 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-111 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

IF-543 BOARD (2/4)
1-671-406-11
B-NMA038-IF543

IF-543 (3/4); RS-449 INTERFACE

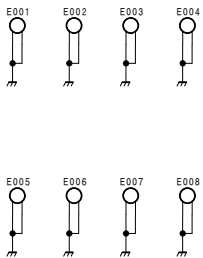
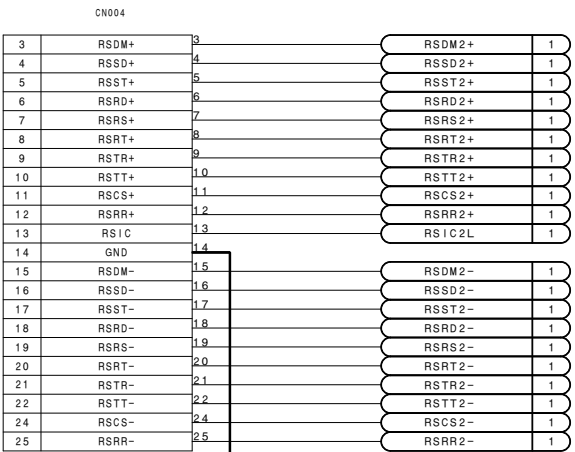
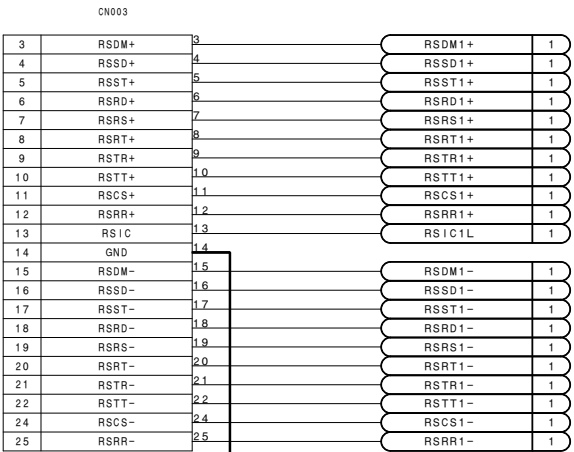
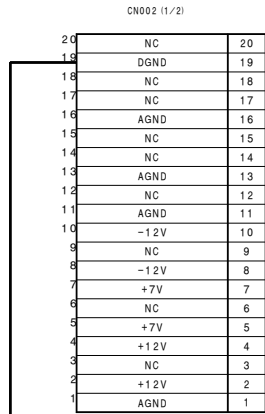
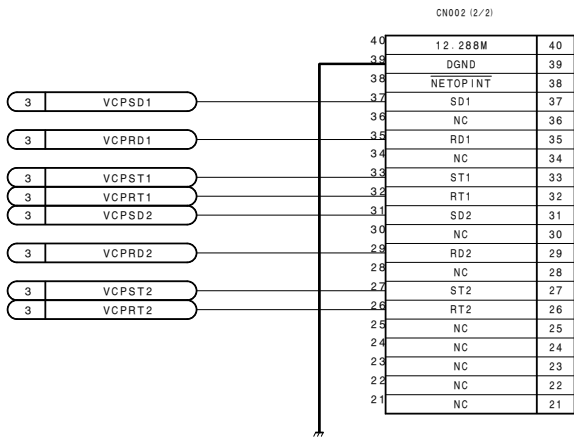
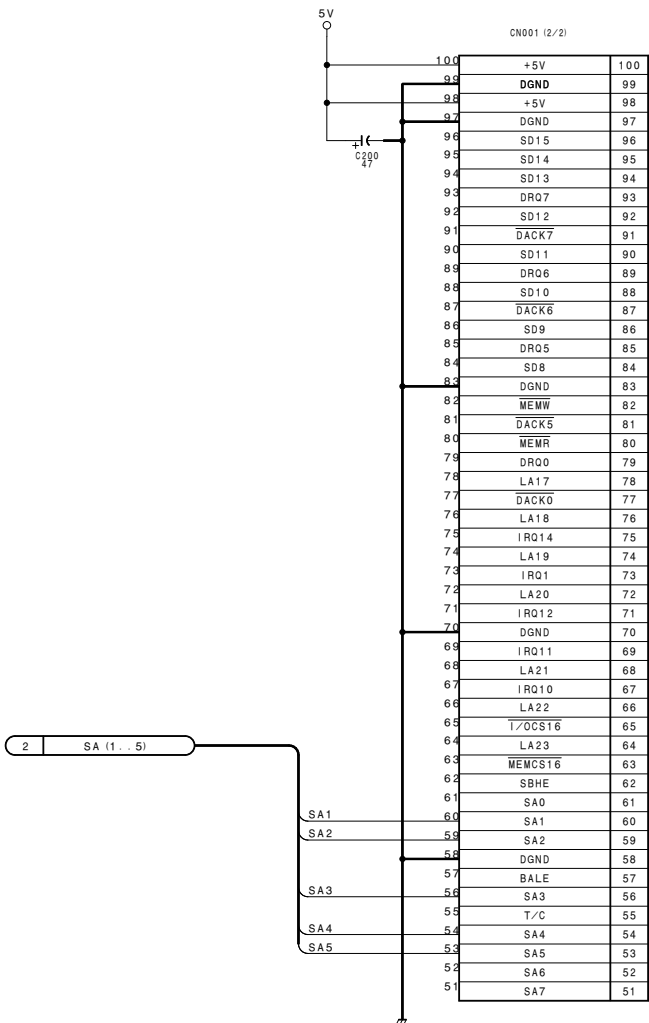
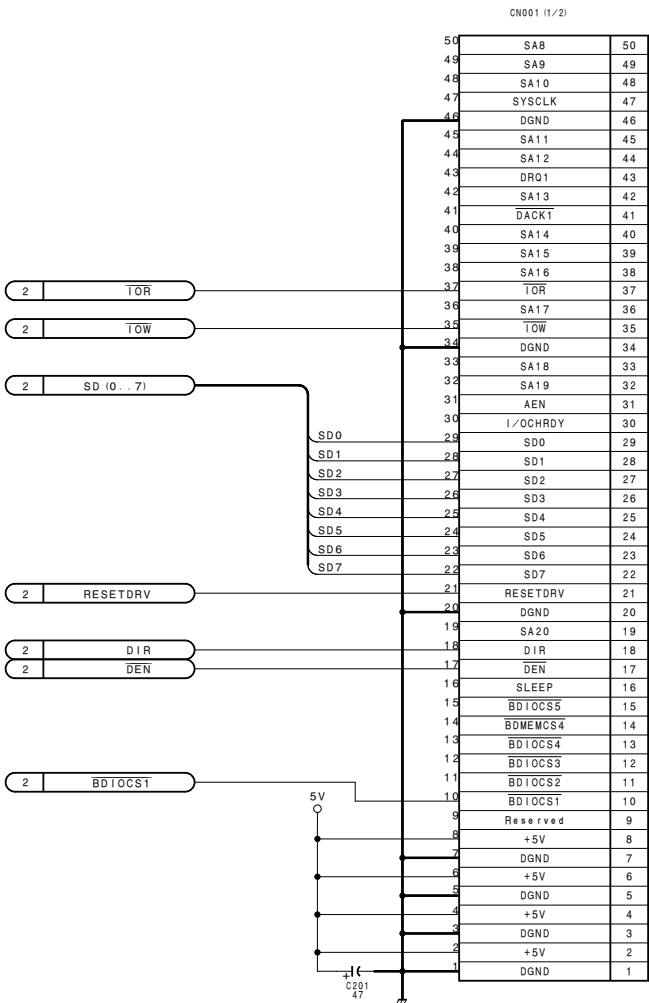
PCS-I520 (J) ; S/N 33001 and higher
PCS-I520 (UC) ; S/N 13001 and higher
PCS-I520 (CE) ; S/N 43001 and higher



1-671-406-11
B-NMA038-IF543

IF-543 (4/4); RS-449 INTERFACE

PCS-I520 (J) ; S/N 33001 and higher
PCS-I520 (UC) ; S/N 13001 and higher
PCS-I520 (CE) ; S/N 43001 and higher



IF-543 BOARD (4/4)
1-671-406-11
B-NMA038-IF543

100 (PCS-5100/5100P-J, E)

IF-543 ; RS-449 INTERFACE

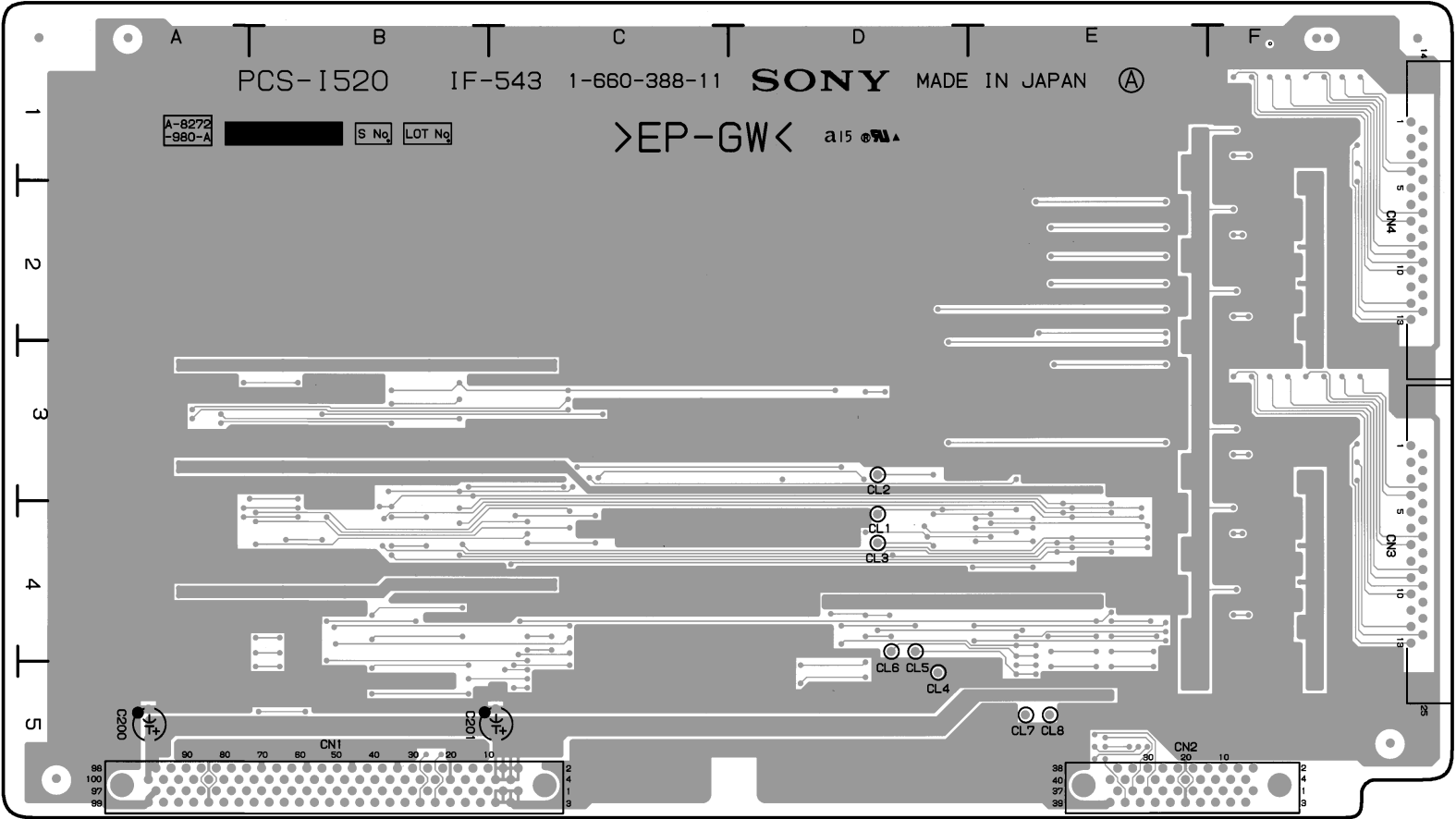
IF-543 (1-660-388-11)

*:B SDIE

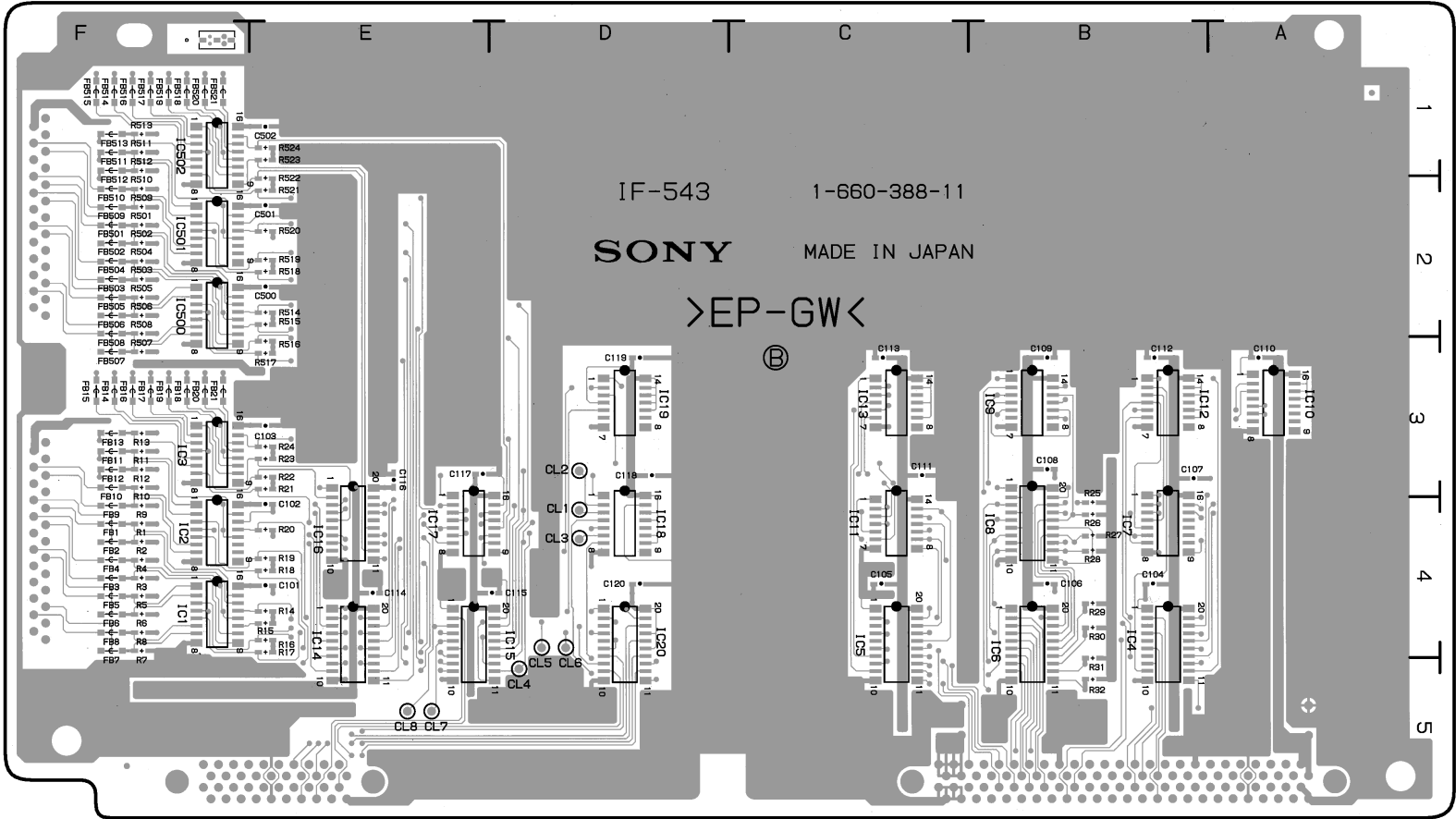
CN1 C-5
CN2 F-5
CN3 F-4

FB1 *F-4
FB2 *F-4
FB3 *F-4
FB4 *F-4
FB5 *F-4
FB6 *F-4
FB7 *F-4
FB8 *F-4
FB9 *F-4
FB10 *F-3
FB11 *F-3
FB12 *F-3
FB13 *F-3
FB14 *F-3
FB15 *F-3
FB16 *F-3
FB17 *F-3
FB18 *F-3
FB19 *F-3
FB20 *F-3
FB21 *F-3

IC1 *F-4
IC2 *F-4
IC3 *F-3
IC4 *B-4
IC5 *C-4
IC6 *B-4
IC7 *B-4
IC8 *B-4
IC9 *B-3
IC10 *A-3
IC11 *C-4
IC12 *B-3
IC13 *C-3
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IC17 *E-4
IC18 *D-4
IC19 *D-3
IC20 *D-4

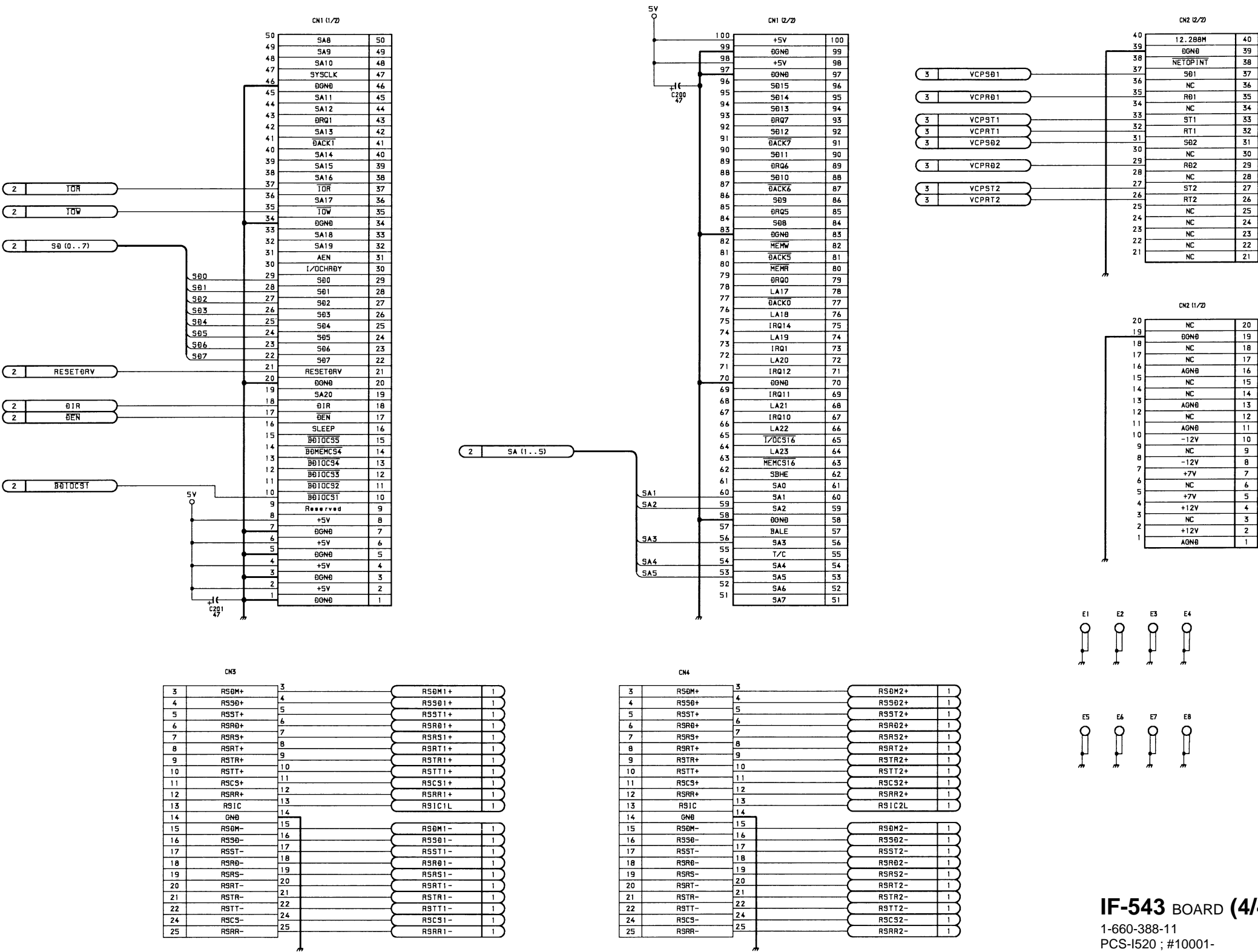


IF-543 -A SIDE-
1-660-388-11
PCS-I520 ; #10001-

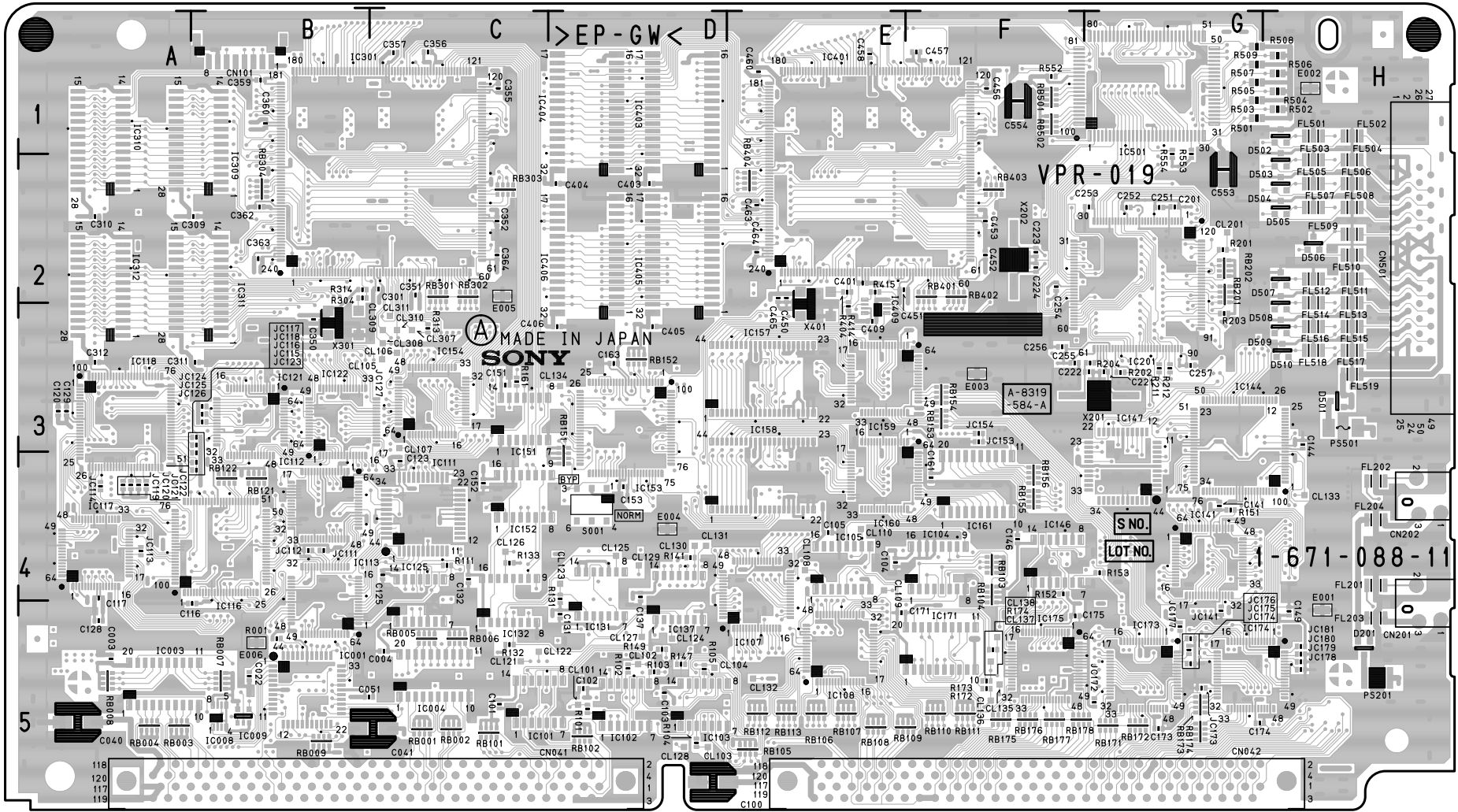


IF-543 -B SIDE-
1-660-388-11
PCS-I520 ; #10001-

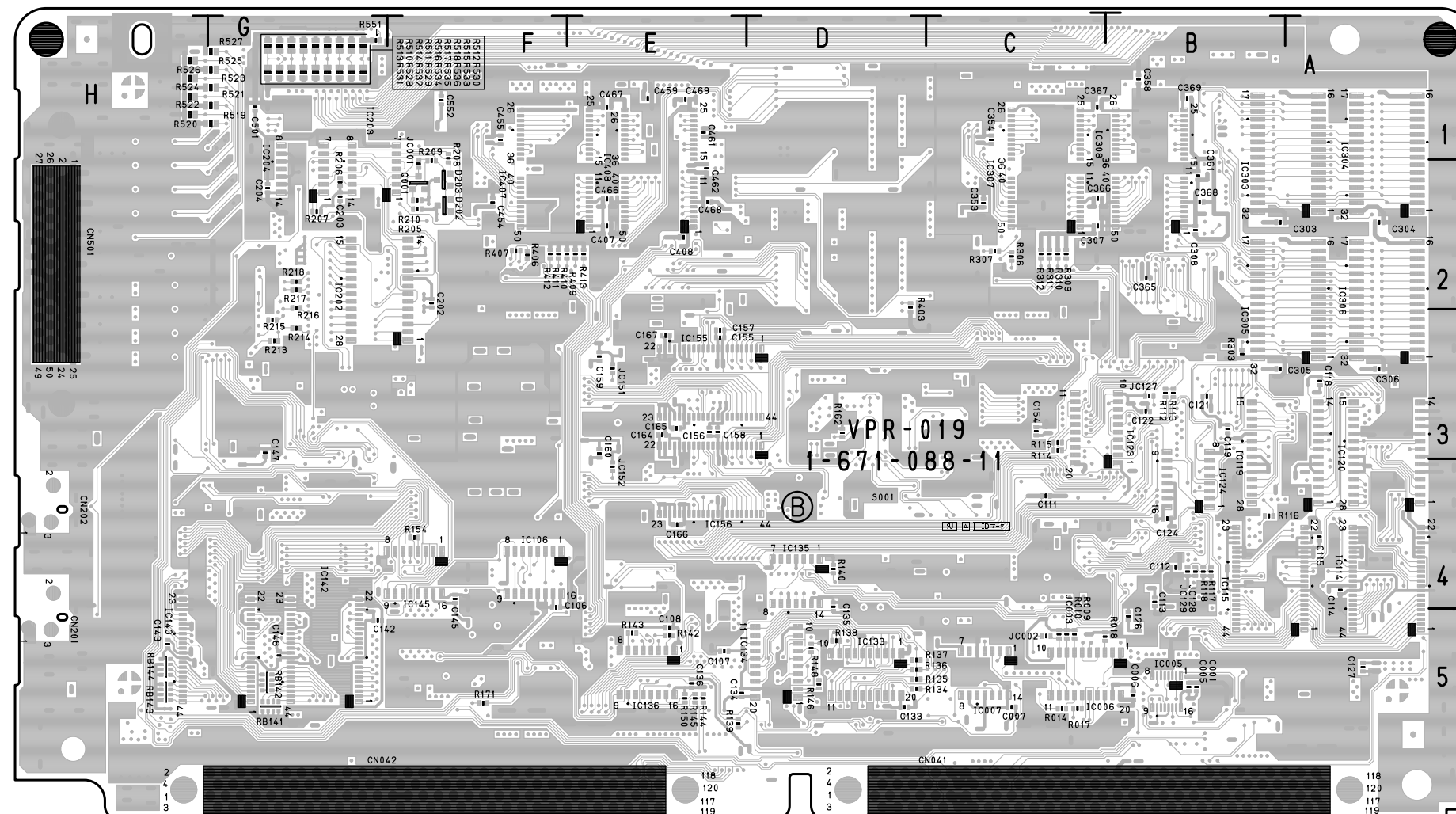
IF-543 (4/4); RS-449 INTERFACE



PCS-P500 (J) : SN 63001 and higher
PCS-P500 (UC) : SN 23001 and higher
PCS-P500P (CE) : SN 53001 and higher

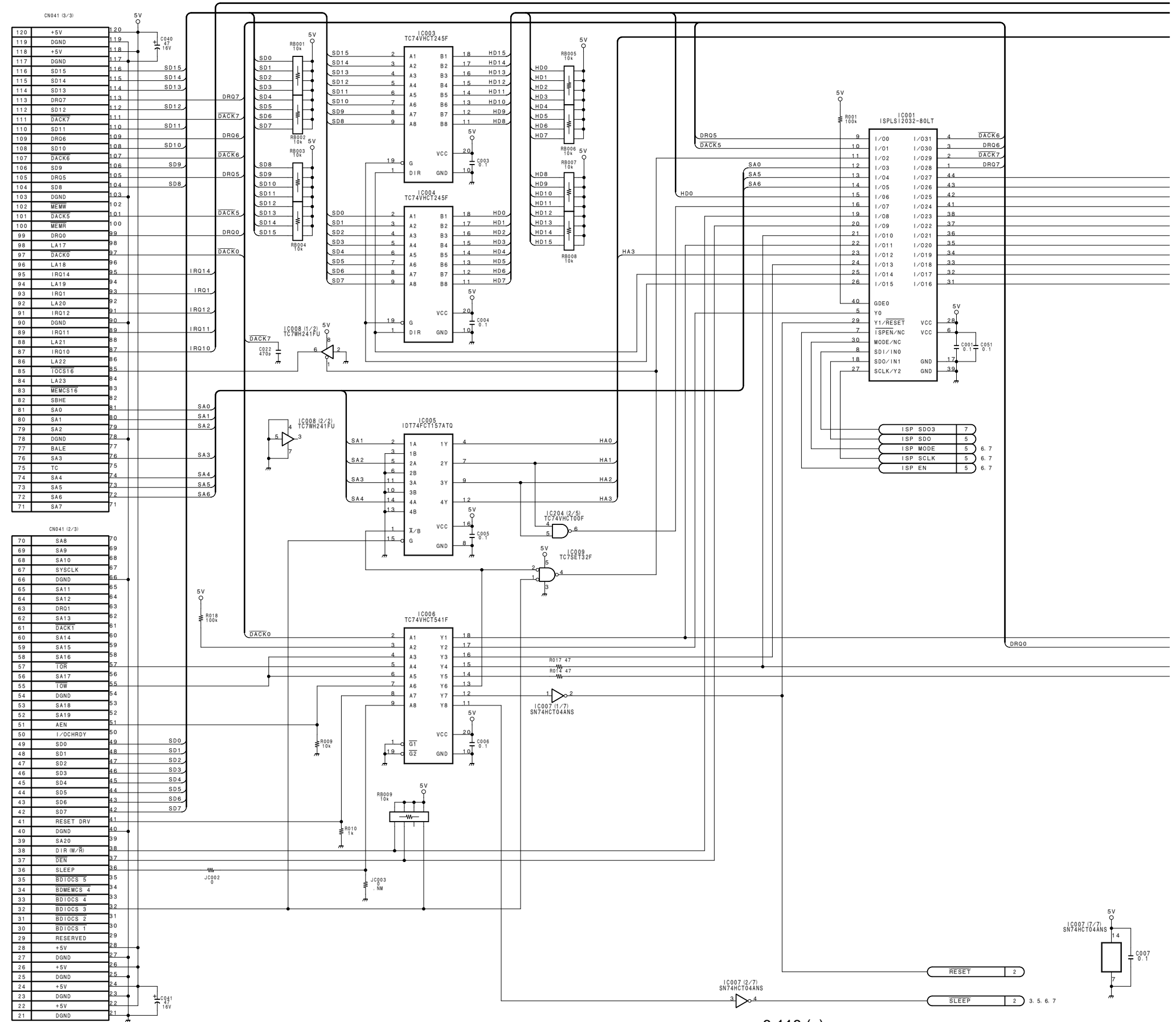


VPR-019B -A SIDE-
SUFFIX: -11



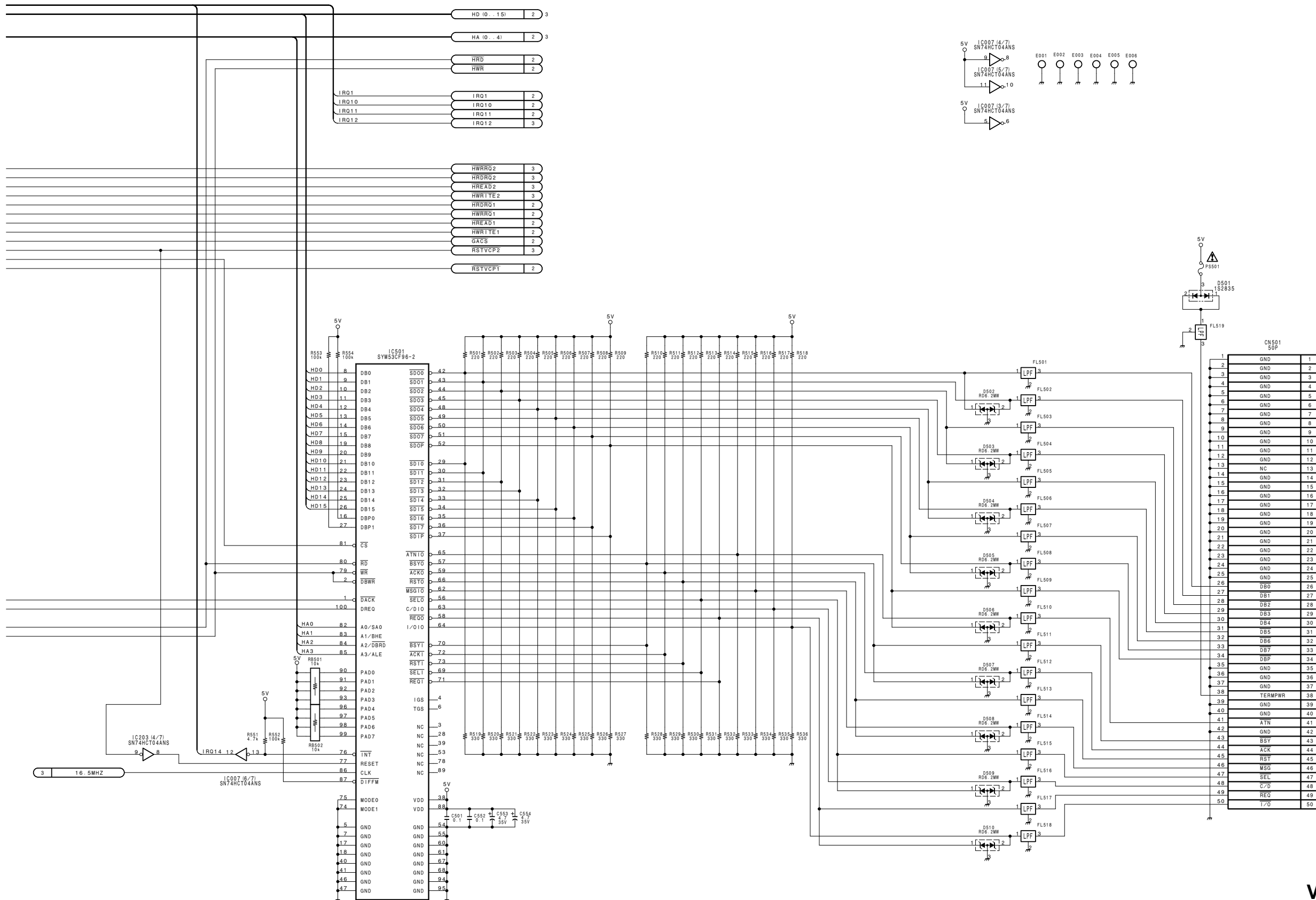
VPR-019B -B SIDE-
SUFFIX: -11

VPR-019B (1/8); VIDEO CODEC (H.221, H.261, JPEG, MMR), SIRCS RECEIVE • DECODE



(PCS-P500/P500P SERVICE MANUAL Volume 2)

(PCS-P500/P500P SERVICE MANUAL Volume 2)

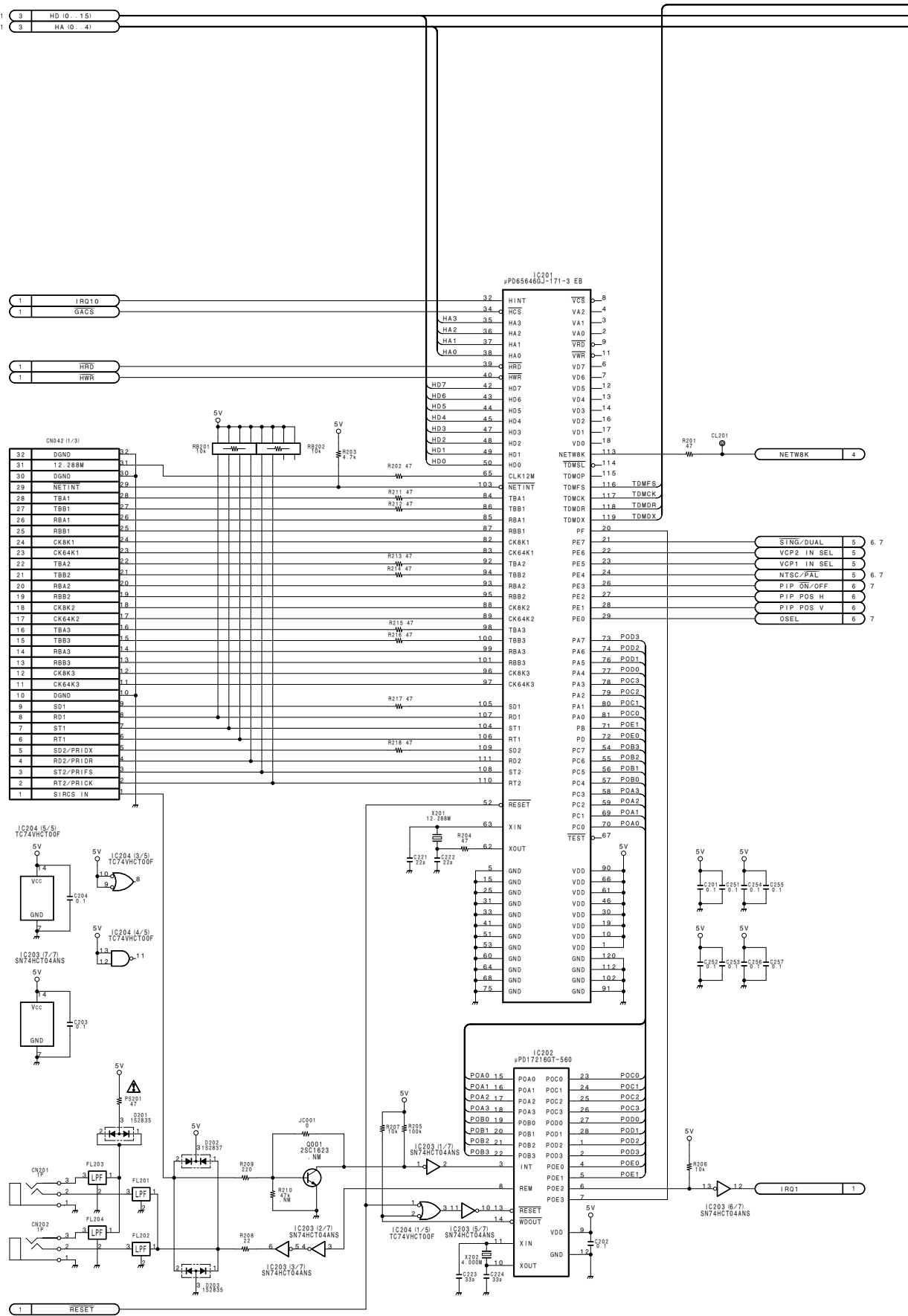


B-NMX112-VPR019-6

6-119 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

106 (PCS-5100/5100P-J, E)

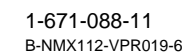
VPR-019B (2/8); VIDEO CODEC (H.221, H.261, JPEG, MMR), SIRCS RECEIVE • DECODE



6-120 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-120 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

(PCS-5100/5100P-J, E) 107



108 (PCS-5100/5100P-J, E)

VPR-019B (3/8); VIDEO CODEC (H.221, H.261, JPEG, MMR), SIRCS RECEIVE • DECODE

PCS-P500 (J) ; S/N 63001 and higher
PCS-P500 (UC) ; S/N 23001 and higher
PCS-P500P (CE) ; S/N 53001 and higher

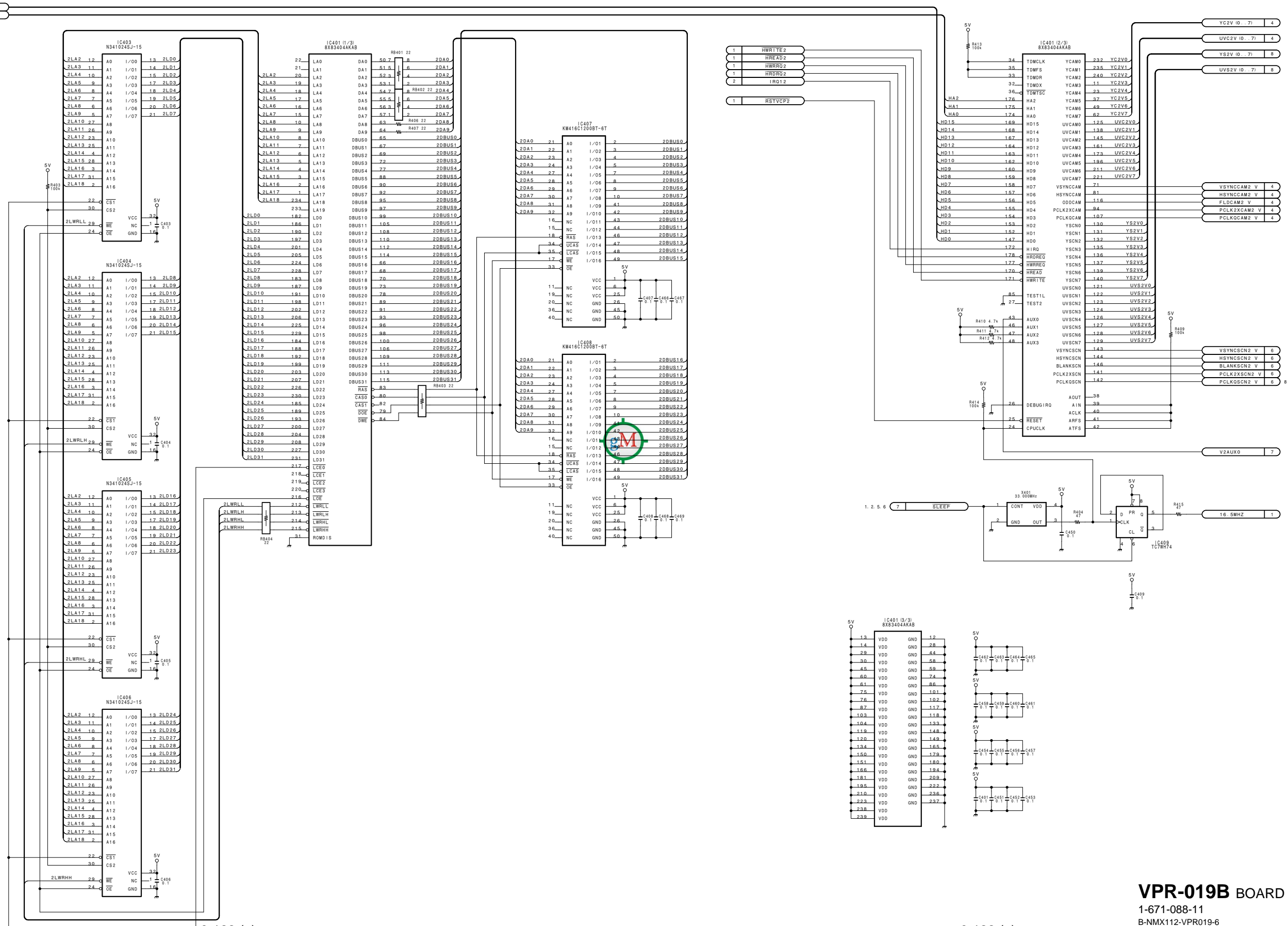
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6-122 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-122 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

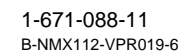
VPR-019B BOARD (3/8)

1-671-088-11
B-NMX112-VPR019-6

[illegible]

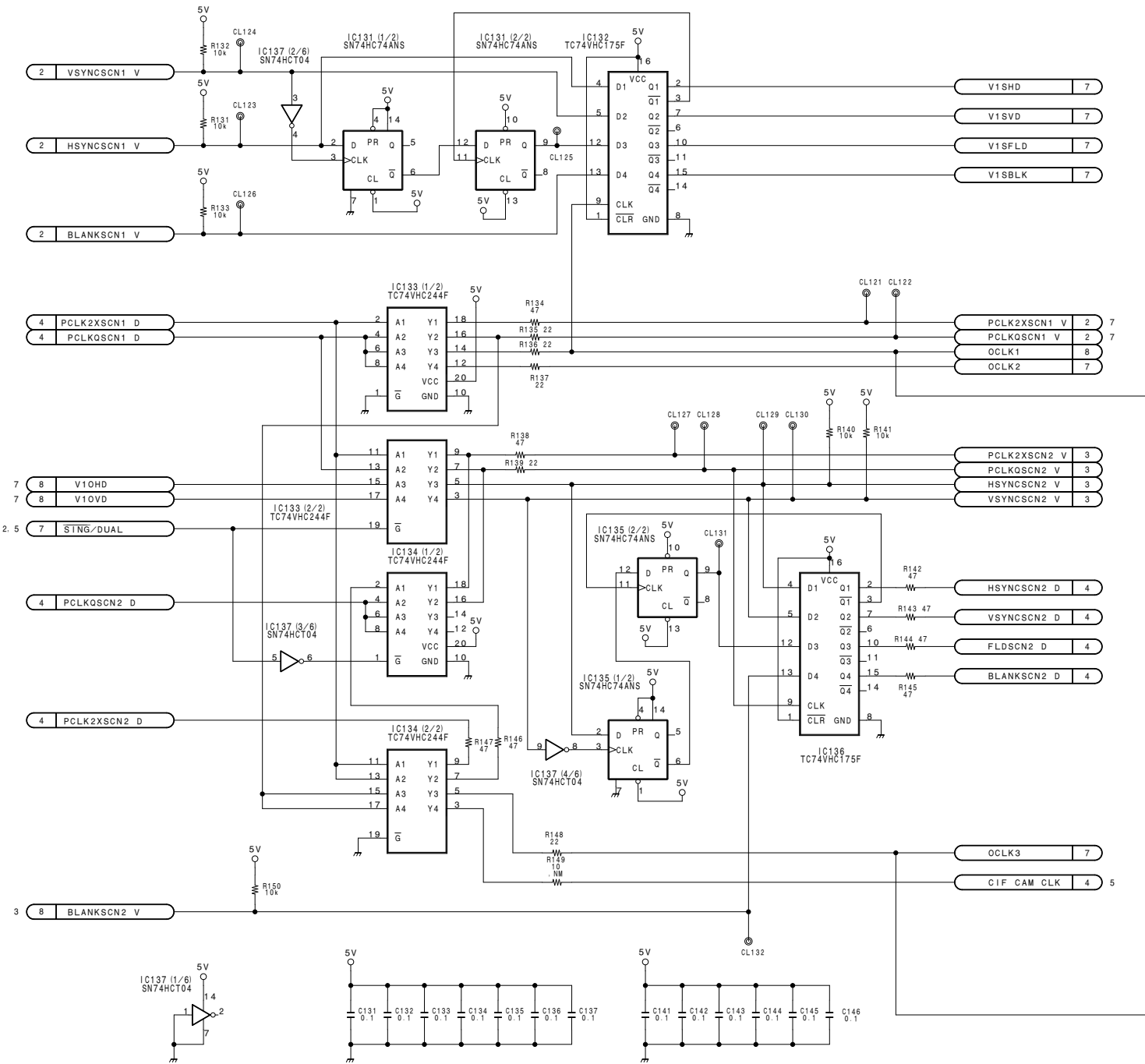
6-123 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

PCS-P500 (J) ;	S/N 63001 and higher
PCS-P500 (UC) ;	S/N 23001 and higher
PCS-P500P (CE) ;	S/N 53001 and higher



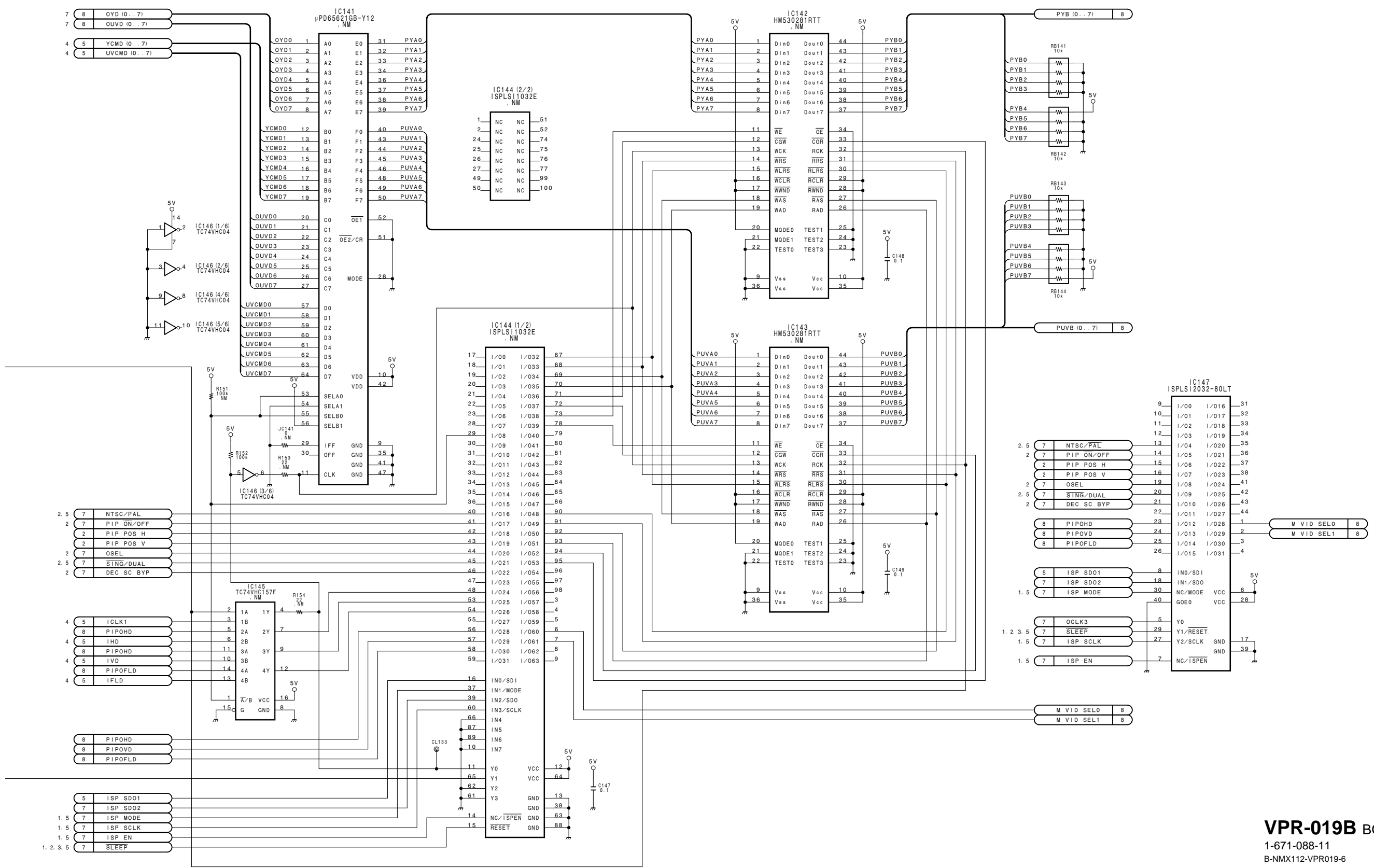
112 (PCS-5100/5100P-J, E)

VPR-019B (6/8); VIDEO CODEC (H.221, H.261, JPEG, MMR), SIRCS RECEIVE • DECODE



PCS-P500 (J) ; S/N 63001 and higher
PCS-P500 (UC) ; S/N 23001 and higher
PCS-P500P (CE) ; S/N 53001 and higher

(PCS-5100/5100P-J, E) 113

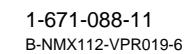


6-127 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-127 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

VPR-019B BOARD (6/8)
1-671-088-11
B-NMX112-VPR019-6

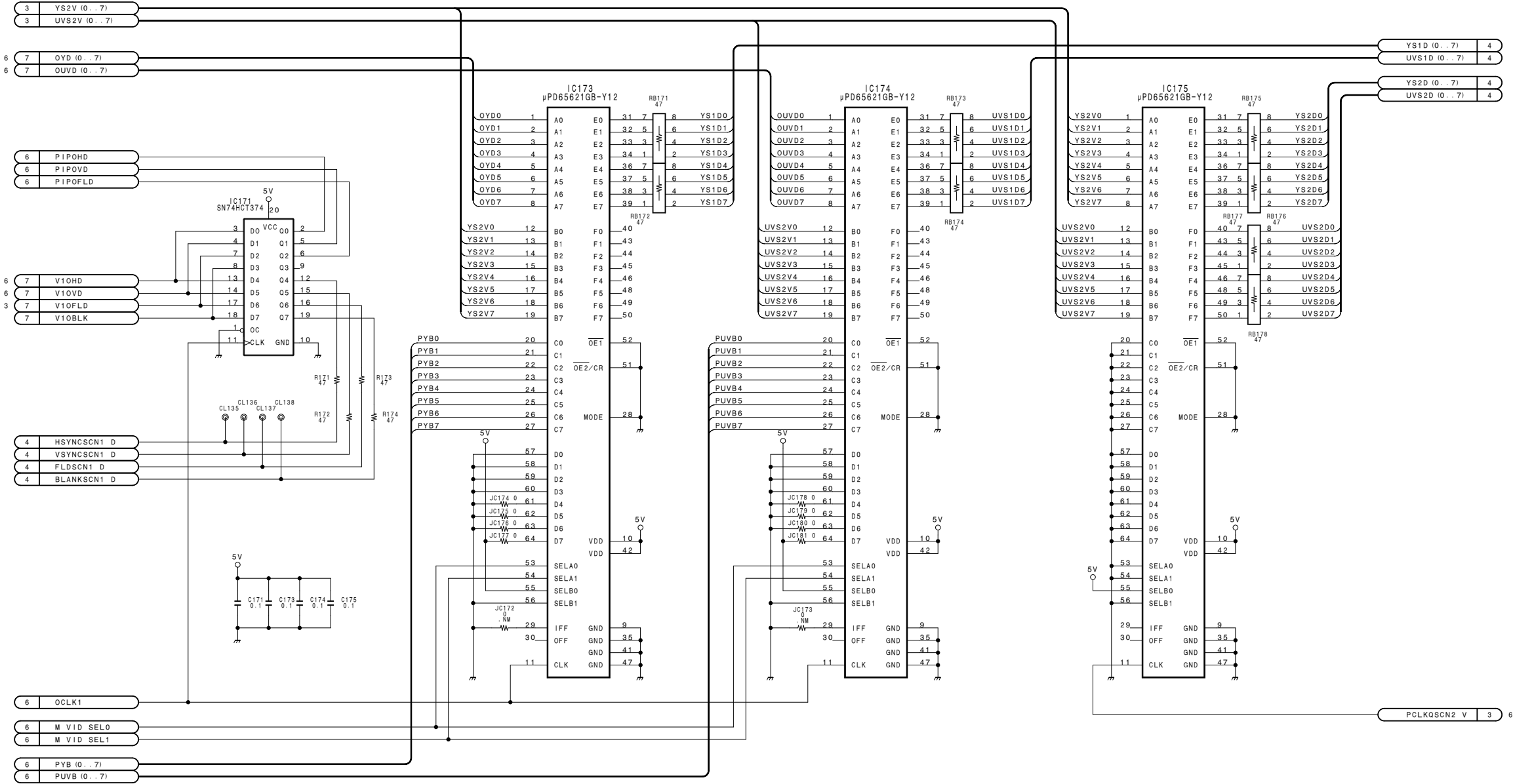
PCS-P500 (J) ;	S/N 63001 and higher
PCS-P500 (UC) ;	S/N 23001 and higher
PCS-P500P (CE) ;	S/N 53001 and higher



PCS-P500 (J) ; S/N 63001 and higher
PCS-P500 (UC) ; S/N 23001 and higher
PCS-P500P (CE) ; S/N 53001 and higher

(PCS-5100/5100P-J, E) 115

VPR-019B (8/8); VIDEO CODEC (H.221, H.261, JPEG, MMR), SIRCS RECEIVE • DECODE



VPR-019B BOARD (8/8)

1-671-088-11
B-NMX112-VPR019-6

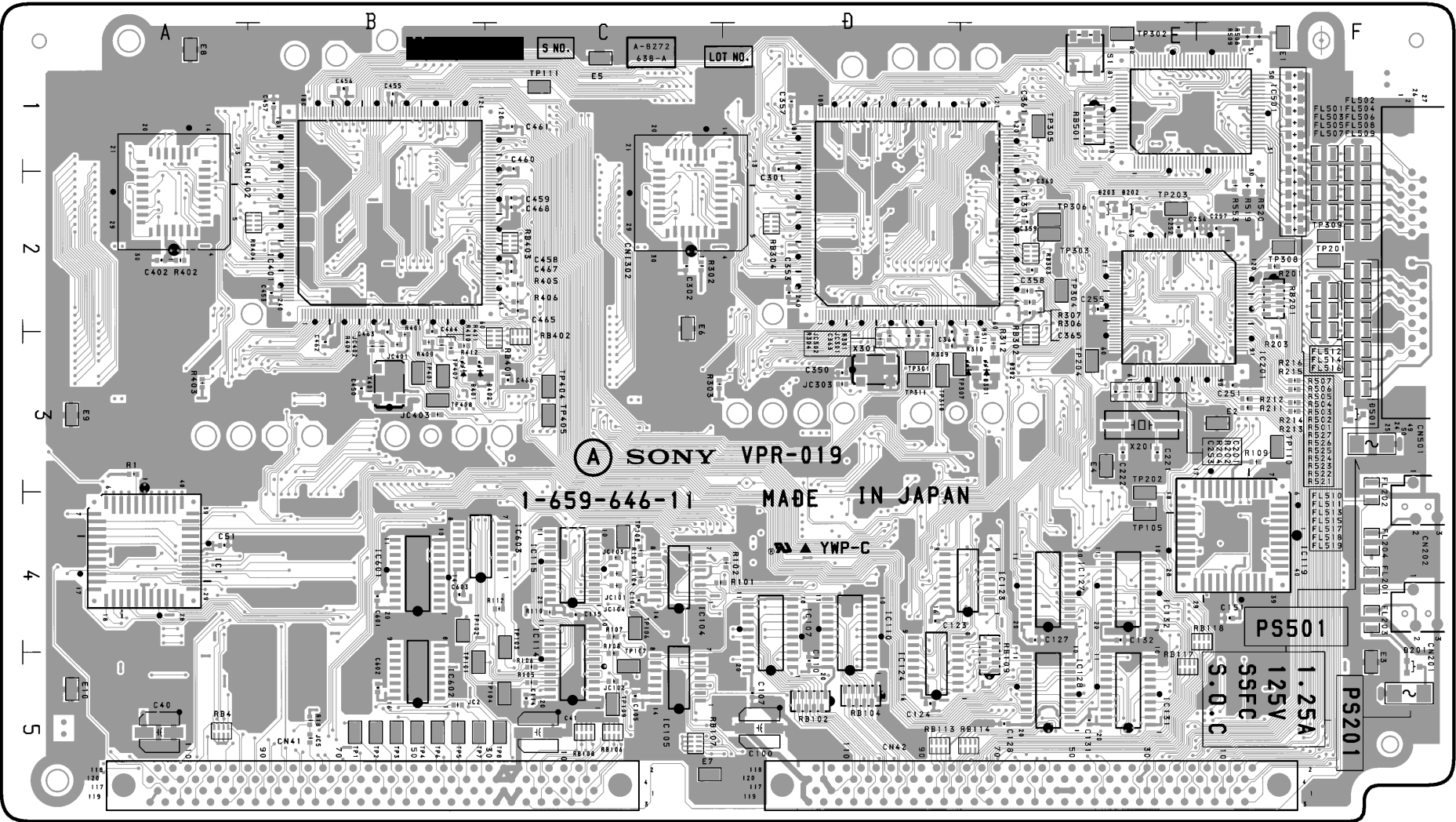
116
(PCS-5100/5100P-J, E)

VPR-019 ; VIDEO CODEC (H.221, H.261, JPEG, MMR), SIRCS RECEIVE·DECODE

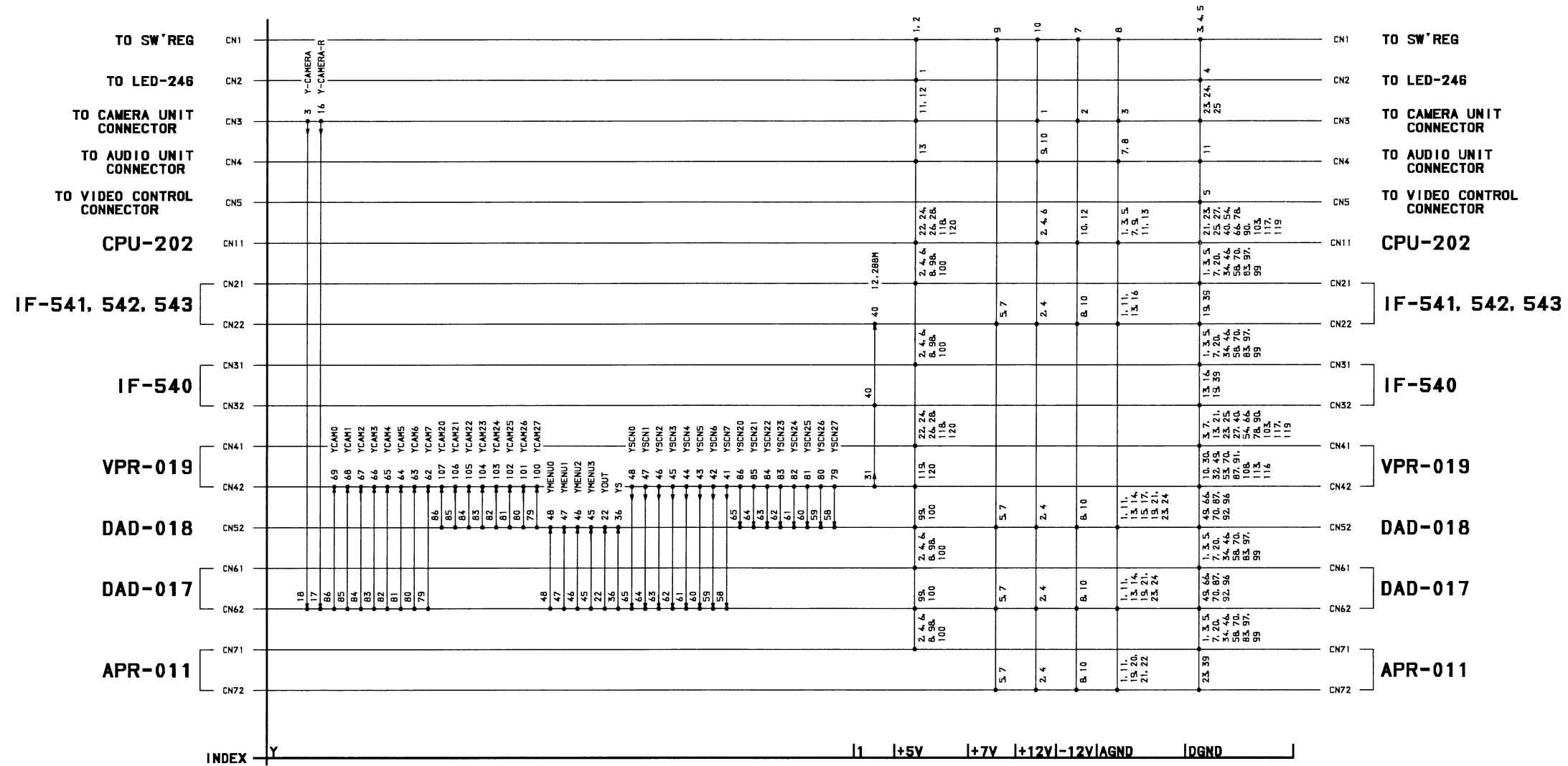
VPR-019 (1-659-646-11)

*:B SDIE

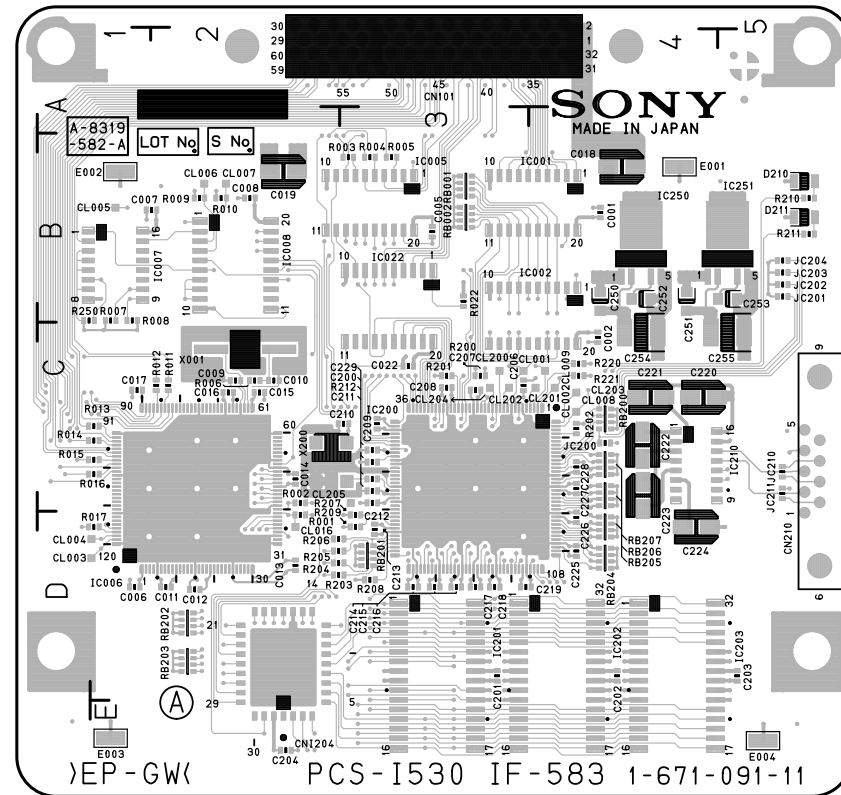
CN11	A-4	IC105	C-5	RB5	*B-5	TP311	D-3
CN1119	F-4	IC106	*D-4	RB6	*B-4	TP401	B-3
		IC107	D-4	RB7	*A-4	TP402	*C-2
CN41	C-5	IC108	*D-4	RB101	*D-5	TP403	*C-2
CN42	F-5	IC109	*D-4	RB102	D-5	TP404	C-3
CN201	F-4	IC110	D-4	RB103	*D-5	TP405	C-3
CN202	F-3	IC111	*D-4	RB104	D-5	TP406	*C-3
CN501	F-2	IC112	*C-4	RB105	*F-5	TP407	B-3
		IC113	*C-5	RB106	C-5	TP408	B-3
D1	*F-1	IC114	C-5	RB107	C-5		
D2	*E-1	IC115	C-4	RB108	C-5	X201	E-3
D3	*E-1	IC116	*C-4	RB111	*E-5	X202	*E-2
D201	F-5	IC117	*C-5	RB112	*E-5	X301	D-3
D202	E-2	IC118	*C-4	RB113	D-5	X401	B-3
D203	E-2	IC121	*D-4	RB114	E-5		
D301	E-3	IC122	*D-5	RB115	*E-5		
D302	E-3	IC123	E-4	RB116	*E-5		
D401	B-3	IC124	D-5	RB117	E-5		
D402	C-3	IC125	*E-4	RB118	F-4		
D501	F-3	IC126	*E-5	RB201	F-2		
		IC127	E-4	RB301	*E-2		
E1	F-1	IC128	E-5	RB302	E-3		
E2	F-3	IC129	*E-4	RB303	E-2		
E3	F-5	IC130	*E-5	RB304	D-2		
E4	E-3	IC131	E-5	RB401	C-3		
E5	C-1	IC132	E-4	RB402	C-3		
E6	C-2	IC201	E-2	RB403	C-2		
E7	C-5	IC202	*E-3	RB404	B-2		
E8	A-1	IC203	*E-2	RB501	E-1		
E9	A-3	IC204	*F-2				
E10	A-5	IC301	D-2	S1	E-1		
		IC303	*C-2				
FL201	F-4	IC304	*C-2	TP1	B-5		
FL202	F-4	IC305	*C-3	TP2	B-5		
FL203	F-4	IC306	*C-3	TP3	B-5		
FL204	F-4	IC307	*E-2	TP4	B-5		
FL501	F-1	IC308	*E-1	TP5	B-5		
FL502	F-1	IC309	*D-2	TP6	B-5		
FL503	F-2	IC401	B-2	TP7	B-5		
FL504	F-2	IC403	*A-2	TP8	C-5		
FL505	F-2	IC404	*A-2	TP101	B-5		
FL506	F-2	IC405	*A-3	TP102	B-4		
FL507	F-2	IC406	*A-3	TP103	C-4		
FL508	F-2	IC407	*C-2	TP104	C-5		
FL509	F-2	IC408	*C-2	TP105	E-4		
FL510	F-2	IC409	*B-2	TP106	C-4		
FL511	F-2	IC410	*B-2	TP107	C-5		
FL512	F-2	IC501	E-1	TP108	C-4		
FL513	F-2			TP109	C-5		
FL514	F-2	JC2	B-5	TP110	F-3		
FL515	F-2	JC3	*A-4	TP111	C-1		
FL516	F-2	JC101	C-4	TP201	F-2		
FL517	F-3	JC102	C-5	TP202	E-4		
FL518	F-3	JC301	D-3	TP203	E-2		
FL519	F-3	JC303	D-3	TP204	E-3		
		JC401	B-3	TP301	D-3		
IC3	*A-4	JC403	B-3	TP302	E-1		
IC4	*B-4			TP303	E-2		
IC5	*A-4	PS201	F-5	TP304	E-2		
IC6	*B-5	PS501	F-3	TP305	E-1		
IC7	*E-1			TP306	E-2		
IC101	*F-5	Q1	*E-2	TP307	D-3		
IC102	*F-4			TP308	F-2		
IC103	*F-4	RB1	*B-5	TP309	F-2		
IC104	C-4	RB2	*A-5	TP310	D-3		



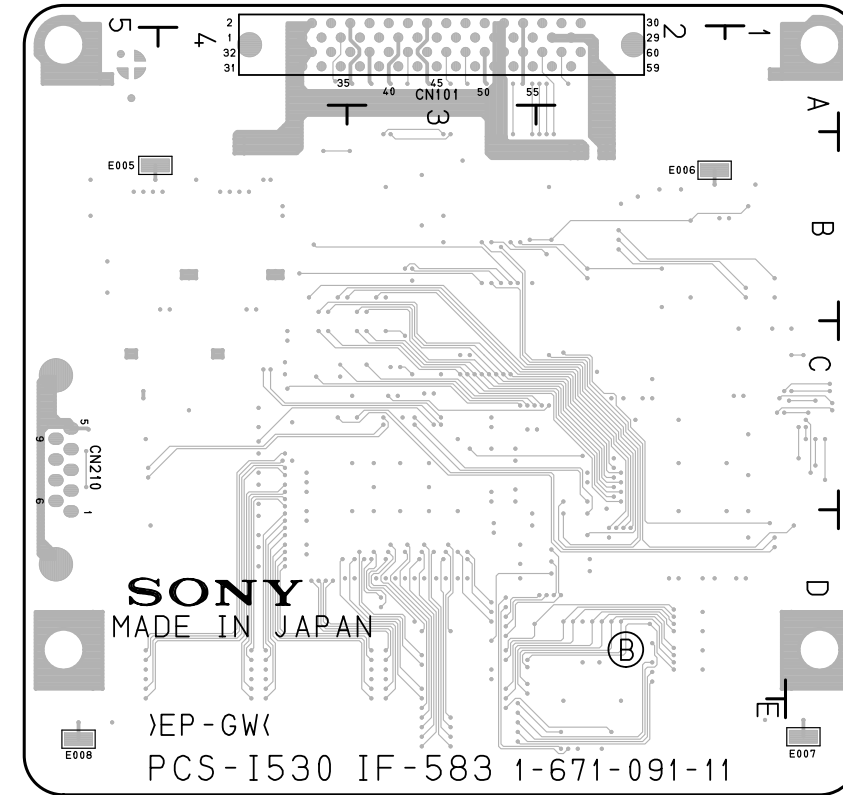
VPR-019 -A SIDE-
1-659-646-11
PCS-P500/P500P ; #10001-



PCS-I530 (J) : SN 33001 and higher
 PCS-I530 (UC) : SN 13001 and higher
 PCS-I530 (CE) : SN 43001 and higher



IF-583 -A SIDE-
SUFFIX: -11

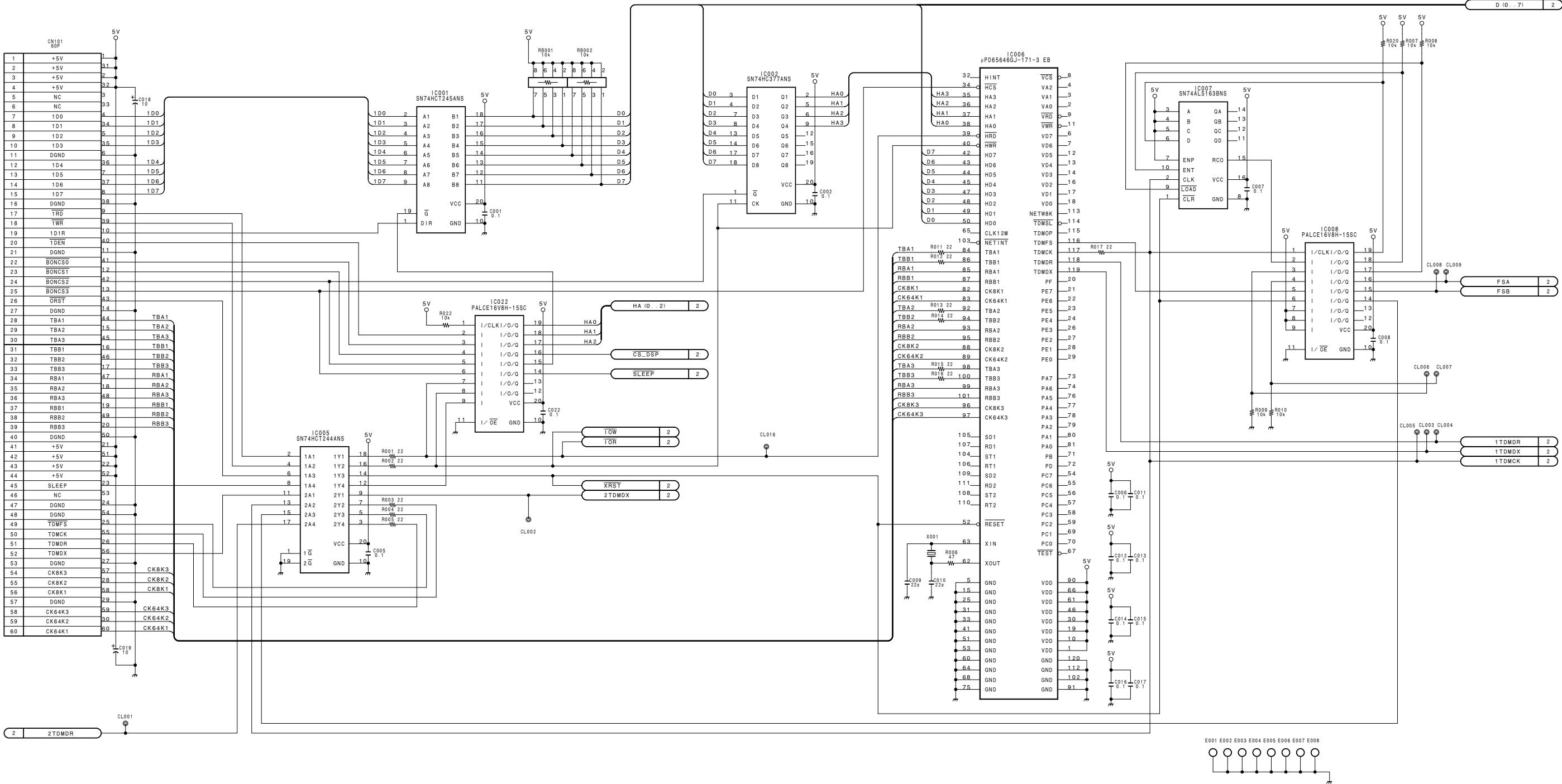


IF-583 -B SIDE-
SUFFIX: -11

120 (PCS-5100/5100P-J, E)

IF-583 (1/2); BONDING INTERFACE

PCS-I530 (J) ; S/N 33001 and higher
PCS-I530 (UC) ; S/N 13001 and higher
PCS-I530 (CE) ; S/N 43001 and higher

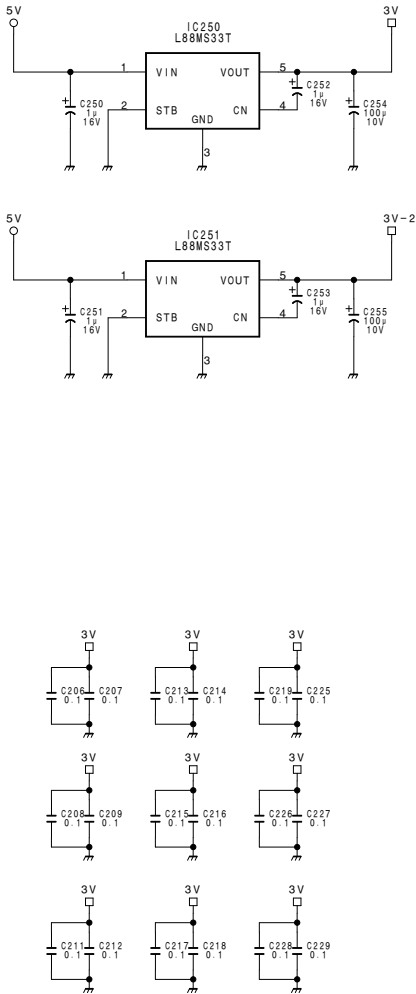
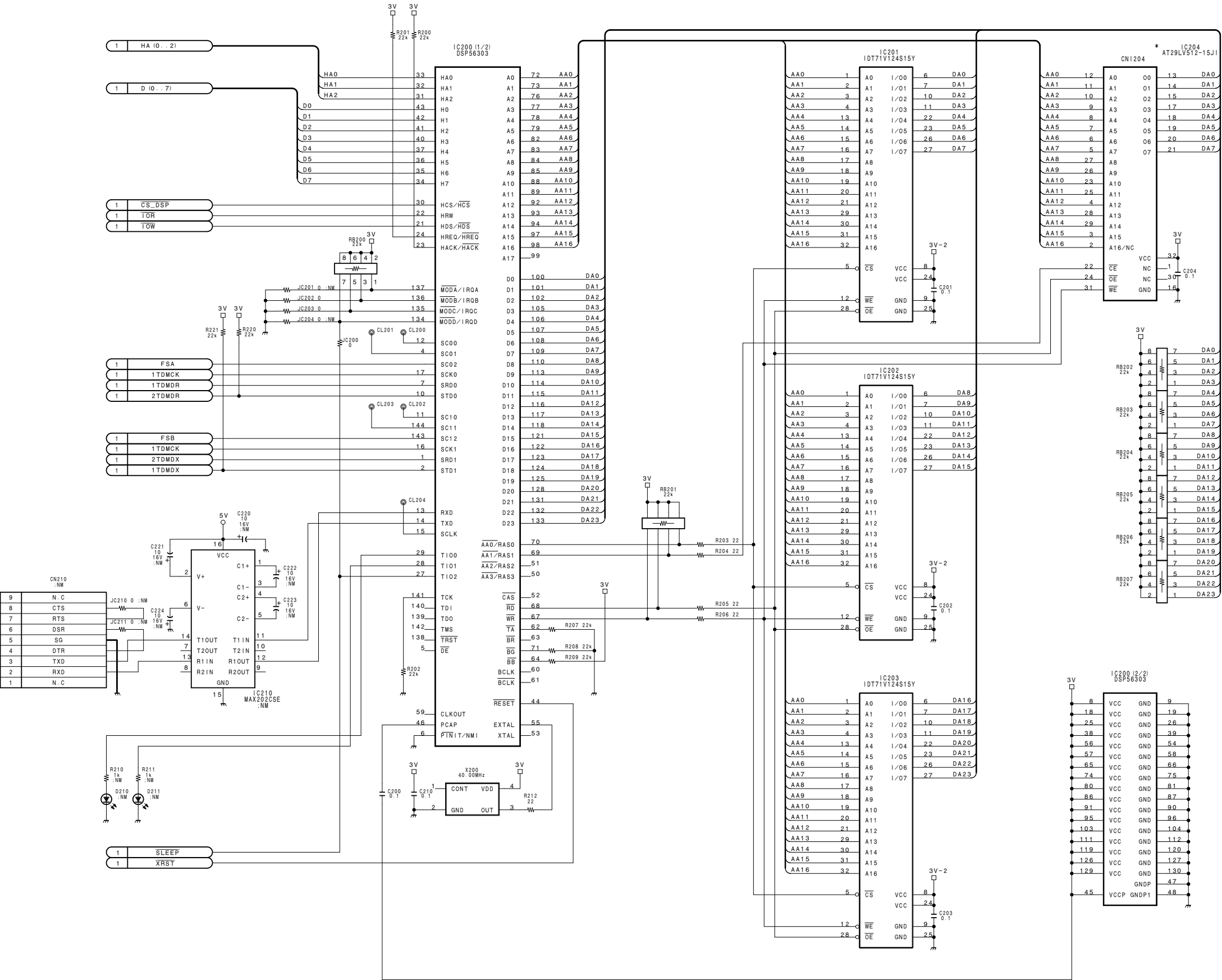


IF-583 BOARD (1/2)

1-671-091-11
B-NMA043-IF583B

IF-583 (2/2); BONDING INTERFACE

PCS-I530 (J) ; S/N 33001 and higher
PCS-I530 (UC) ; S/N 13001 and higher
PCS-I530 (CE) ; S/N 43001 and higher



6-139 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-139 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

122 (PCS-5100/5100P-J, E)

IF-583 ; BONDING INTERFACE

IF-583 (1-661-053-11)

*:B SDIE

CNI27 *E-3
CNI47 *E-2

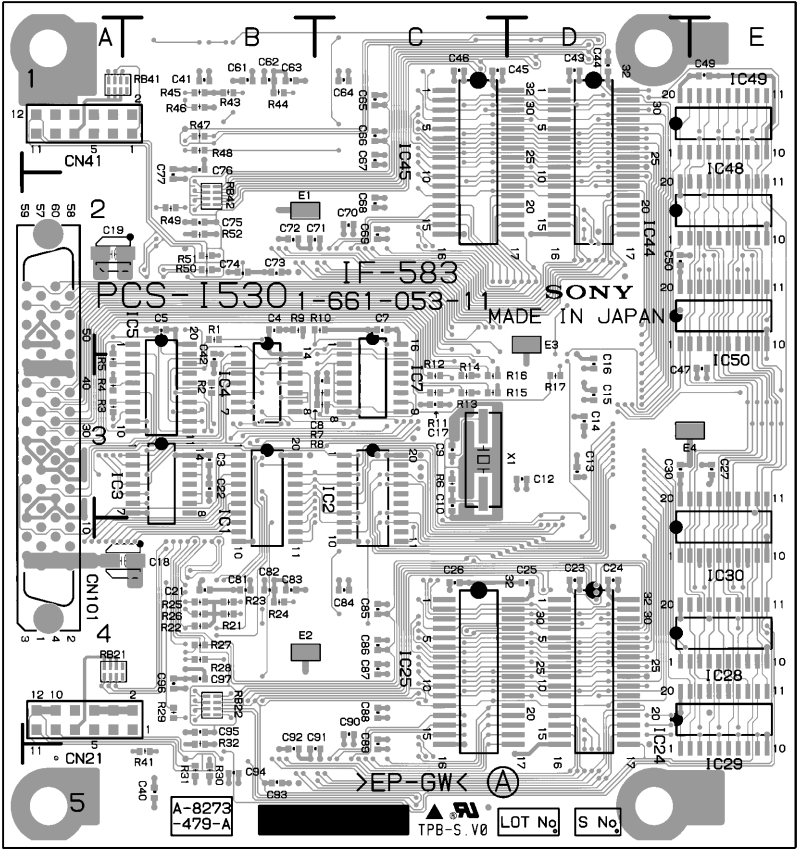
CNI01 A-4

E1 B-2
E2 B-4
E3 D-2
E4 E-3
E5 *C-2
E6 *C-5
E7 *E-1
E8 *E-4

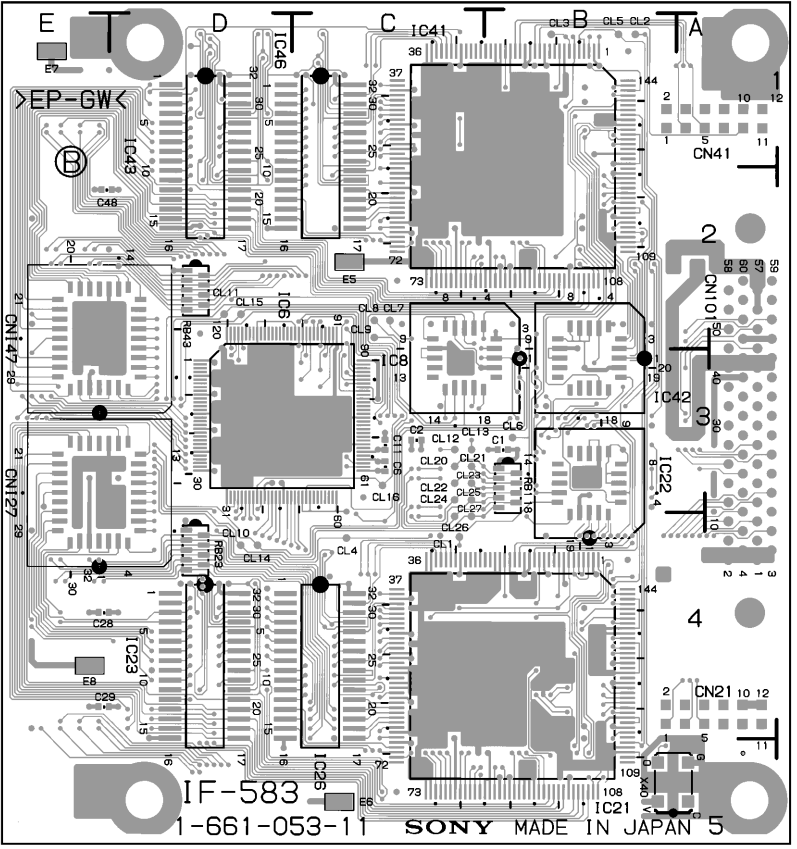
IC1 B-3
IC2 C-3
IC3 B-3
IC4 B-3
IC5 B-3
IC6 *D-3
IC7 C-3
IC8 *C-3
IC21 *B-4
IC22 *B-3
IC23 *D-4
IC24 D-4
IC25 C-4
IC26 *C-4
IC27 *E-3
IC28 E-4
IC29 E-4
IC30 E-4
IC41 *B-1
IC42 *B-3
IC43 *D-1
IC44 D-1
IC45 C-1
IC46 *C-1
IC47 *E-2
IC48 E-2
IC49 E-1
IC50 E-2

RB1 *B-3
RB21 A-4
RB22 B-4
RB23 *D-4
RB41 A-1
RB42 B-2
RB43 *D-2

X1 C-3
X40 *B-5

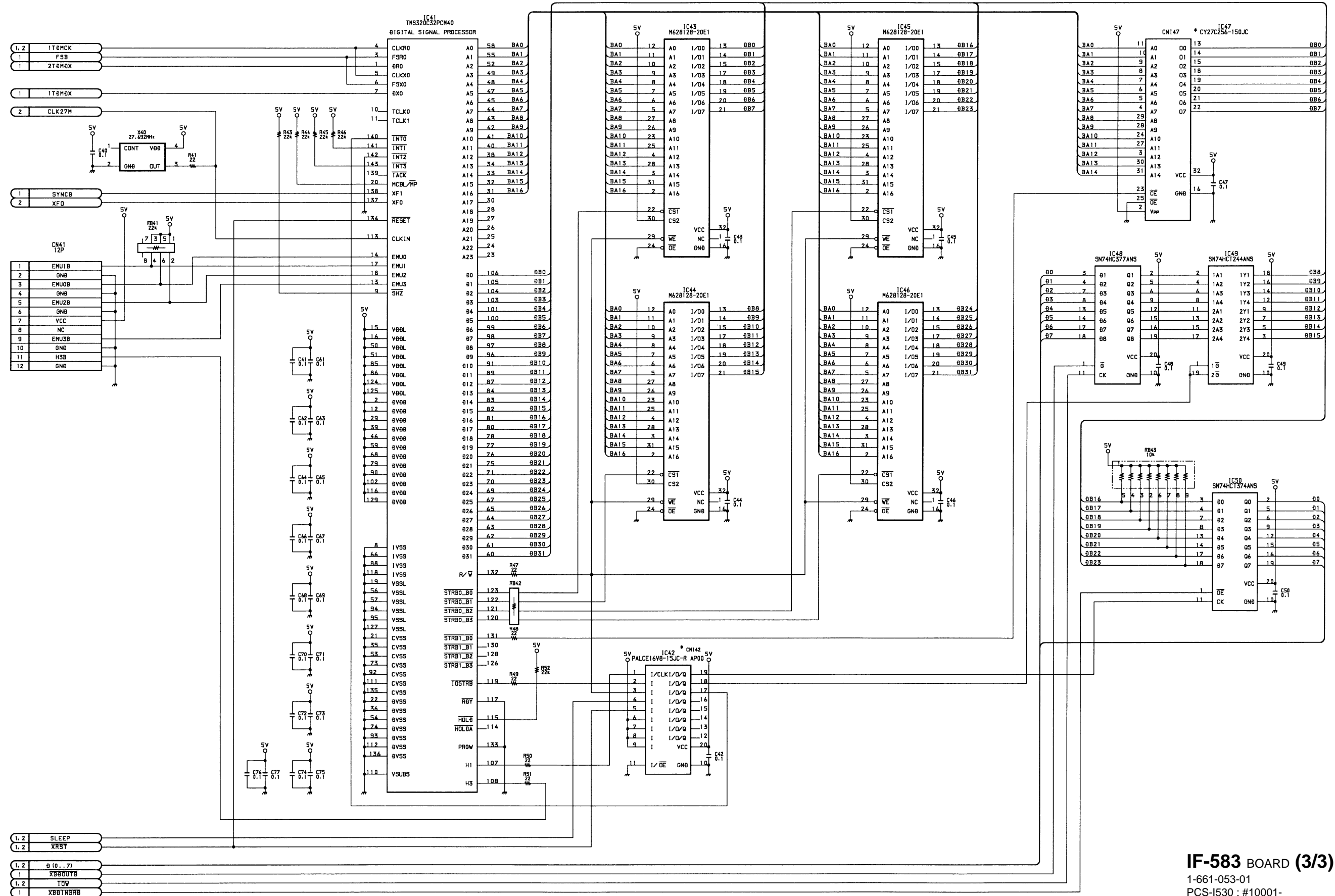


IF-583 -A SIDE-
1-661-053-11
PCS-P500/P500P ; #10001-

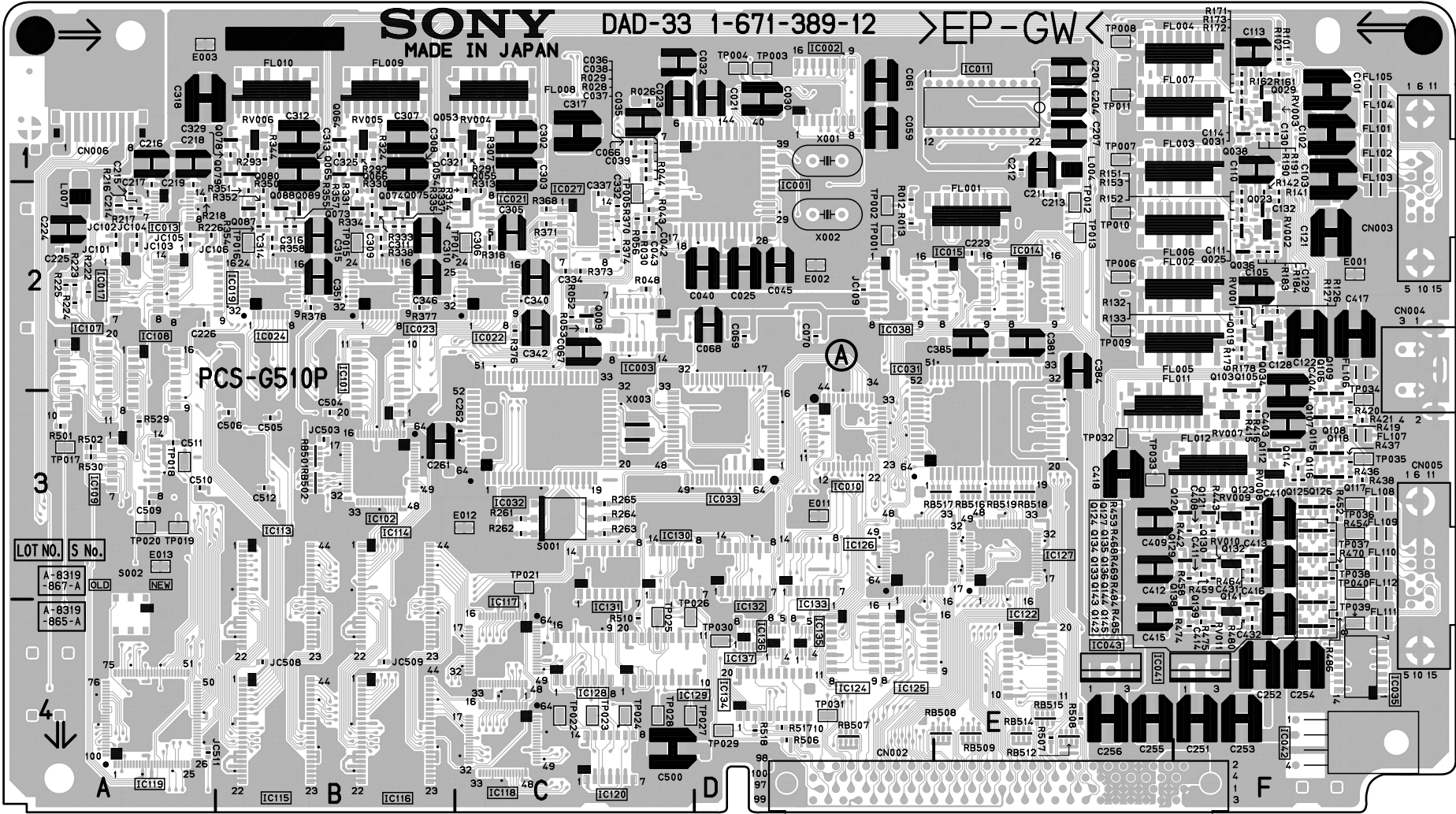


IF-583 -B SIDE-
1-661-053-11
PCS-P500/P500P ; #10001-

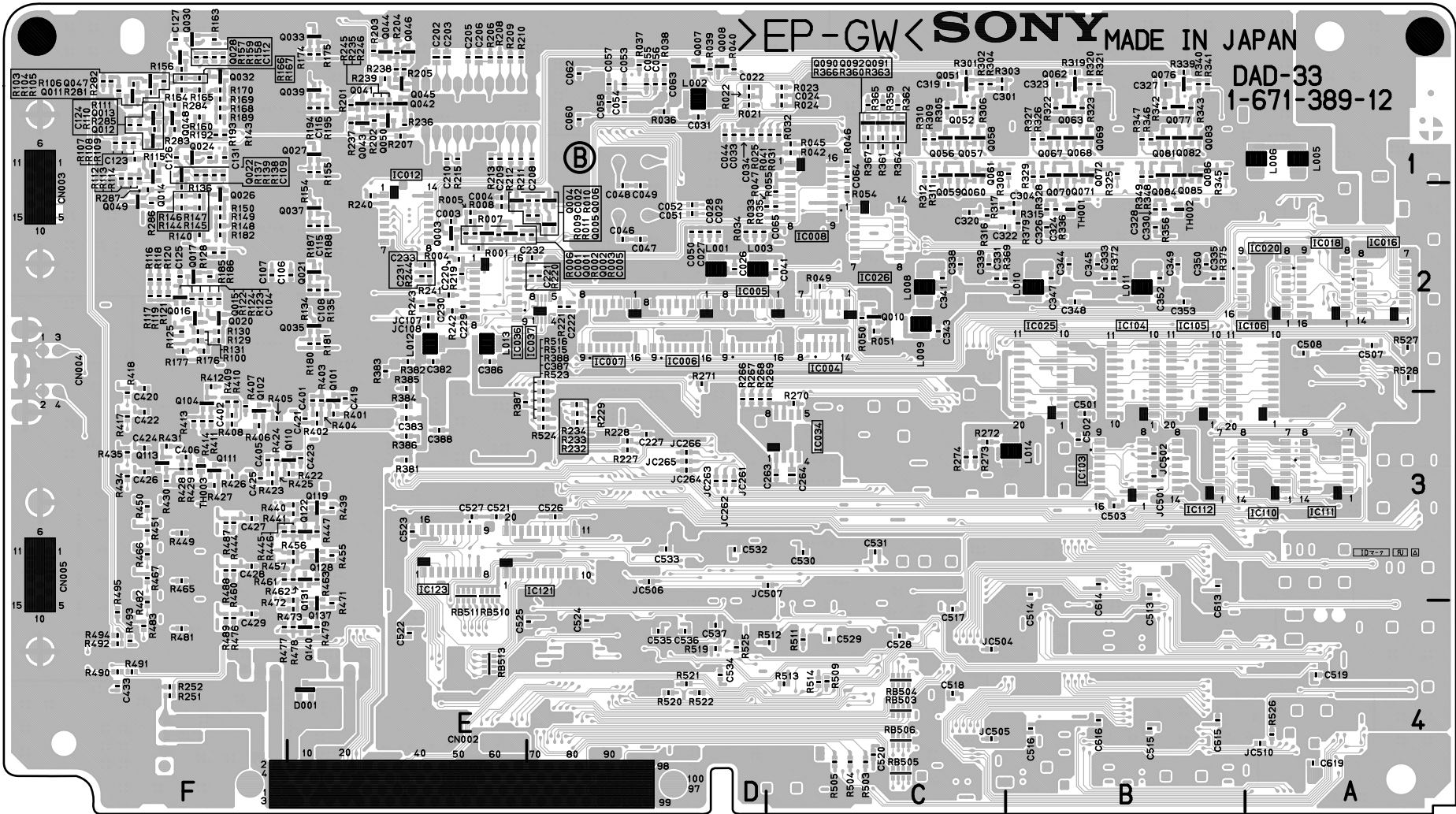
IF-583 (3/3); BONDING INTERFACE



PCS-G510 (J) : SN 30041 and higher
PCS-G510 (UC) : SN 10111 and higher
PCS-G510 (CE) : SN 40171 and higher



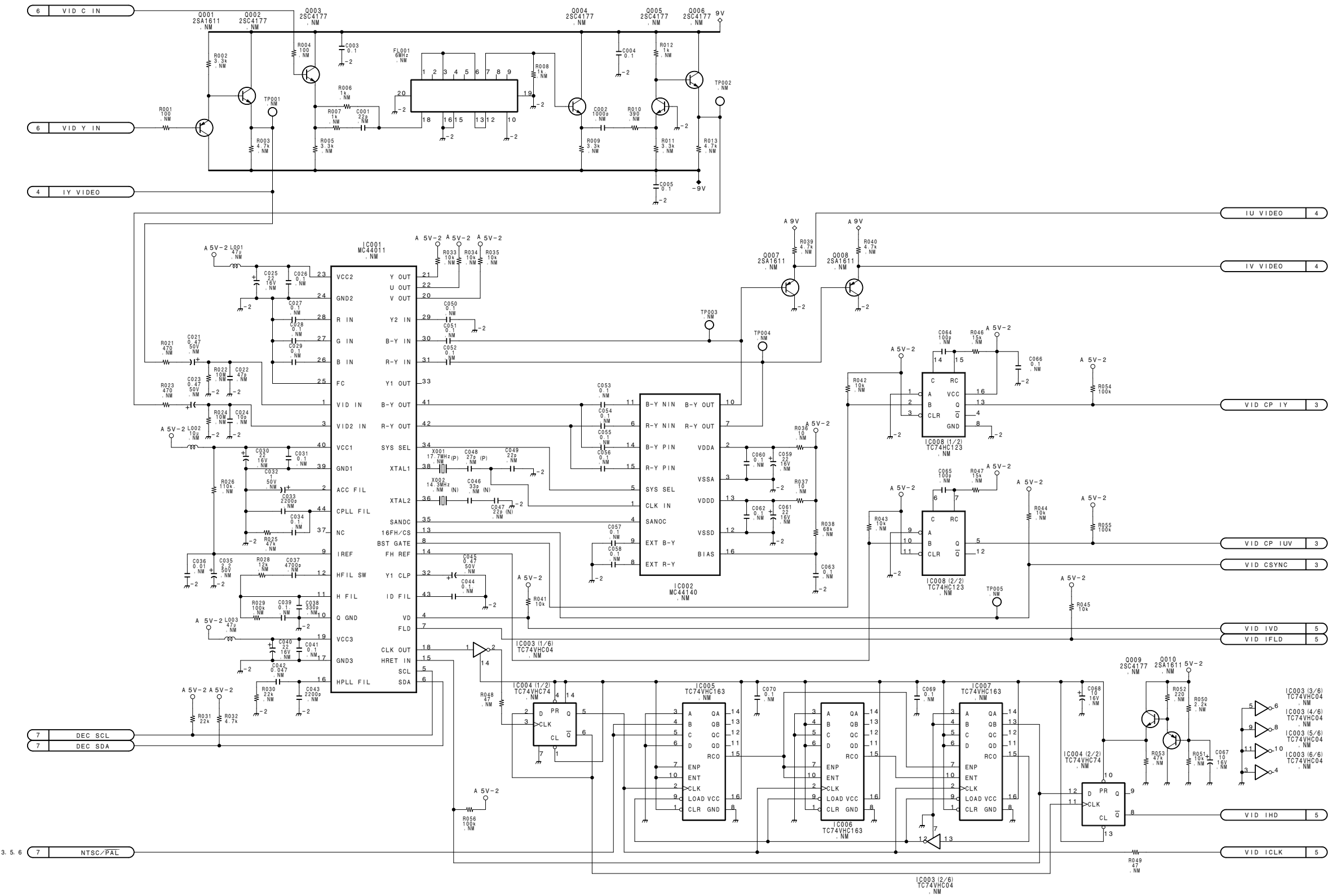
DAD-33/33P -A SIDE-
SUFFIX: -12



DAD-33/33P -B SIDE-
SUFFIX: -12

DAD-33/33P (1/8); DUAL MONITOR

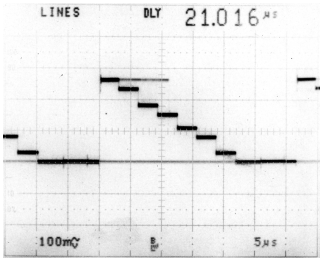
PCS-G510 (J) ; S/N 30041 and higher
PCS-G510 (UC) ; S/N 10111 and higher
PCS-G510 (CE) ; S/N 40171 and higher



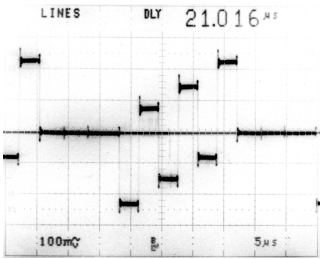
DAD-33/33P BOARD (1/8)

1-671-389-12
B-NMX112-DAD33-3

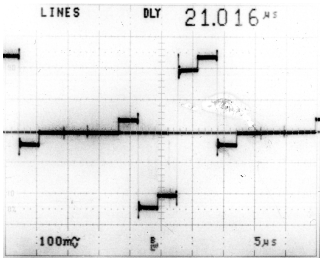
- ① TP6/DAD-33
- ④ TP9/DAD-33



- ② TP7/DAD-33
- ⑤ TP10/DAD-33

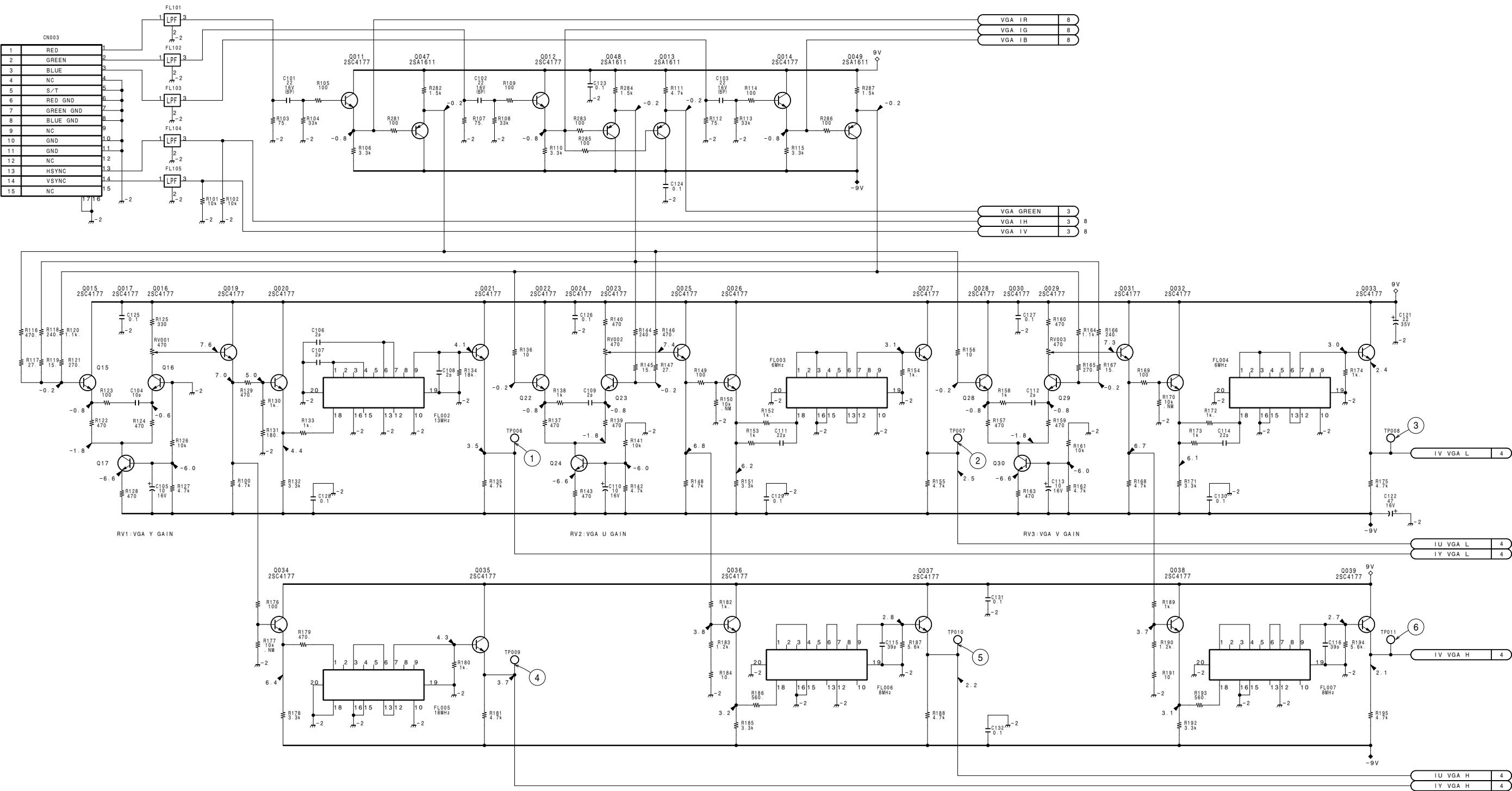


- ③ TP8/DAD-33
- ⑥ TP11/DAD-33



DAD-33/33P (2/8); DUAL MONITOR

PCS-G510 (J) ; S/N 30041 and higher
PCS-G510 (UC) ; S/N 10111 and higher
PCS-G510 (CE) ; S/N 40171 and higher

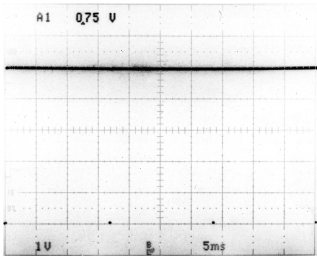


DAD-33/33P BOARD (2/8)

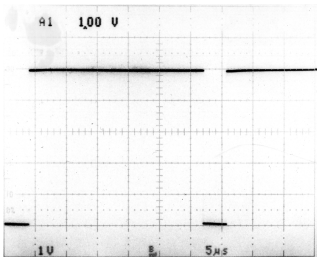
1-671-389-12
B-NMX112-DAD33-3

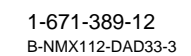
130 (PCS-5100/5100P-J, E)

① TP12/DAD-33

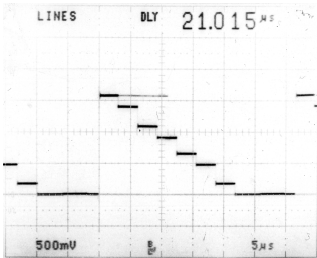


② TP13/DAD-33

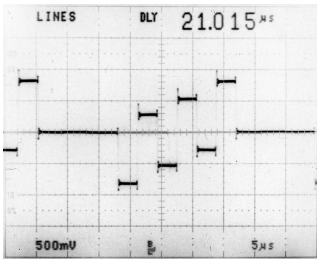




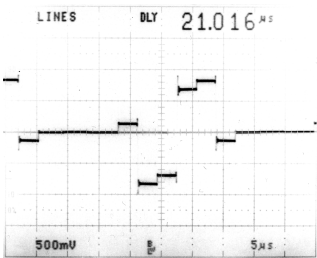
① TP14/DAD-33



② TP15/DAD-33

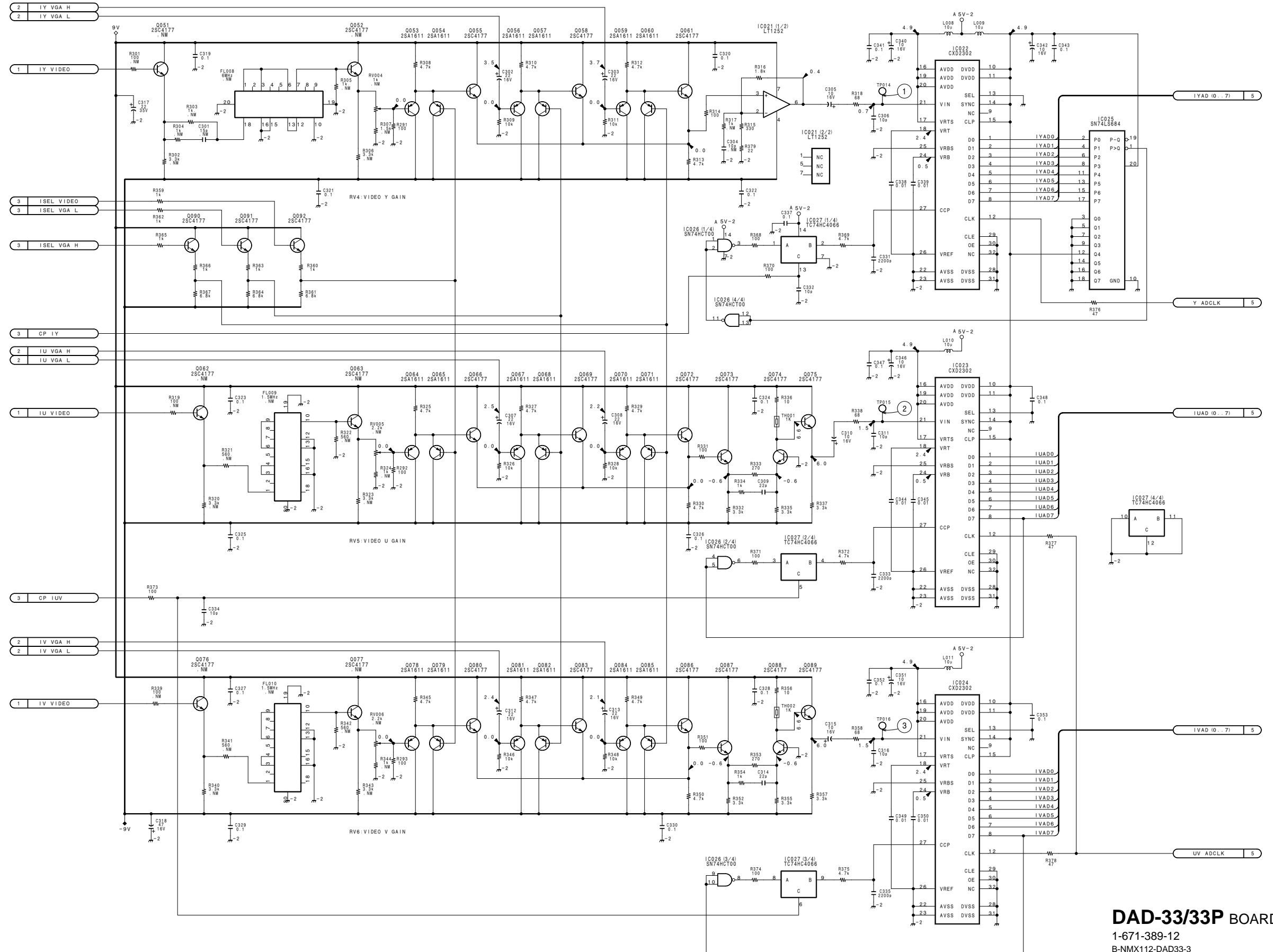


③ TP16/DAD-33



DAD-33/33P (4/8); DUAL MONITOR

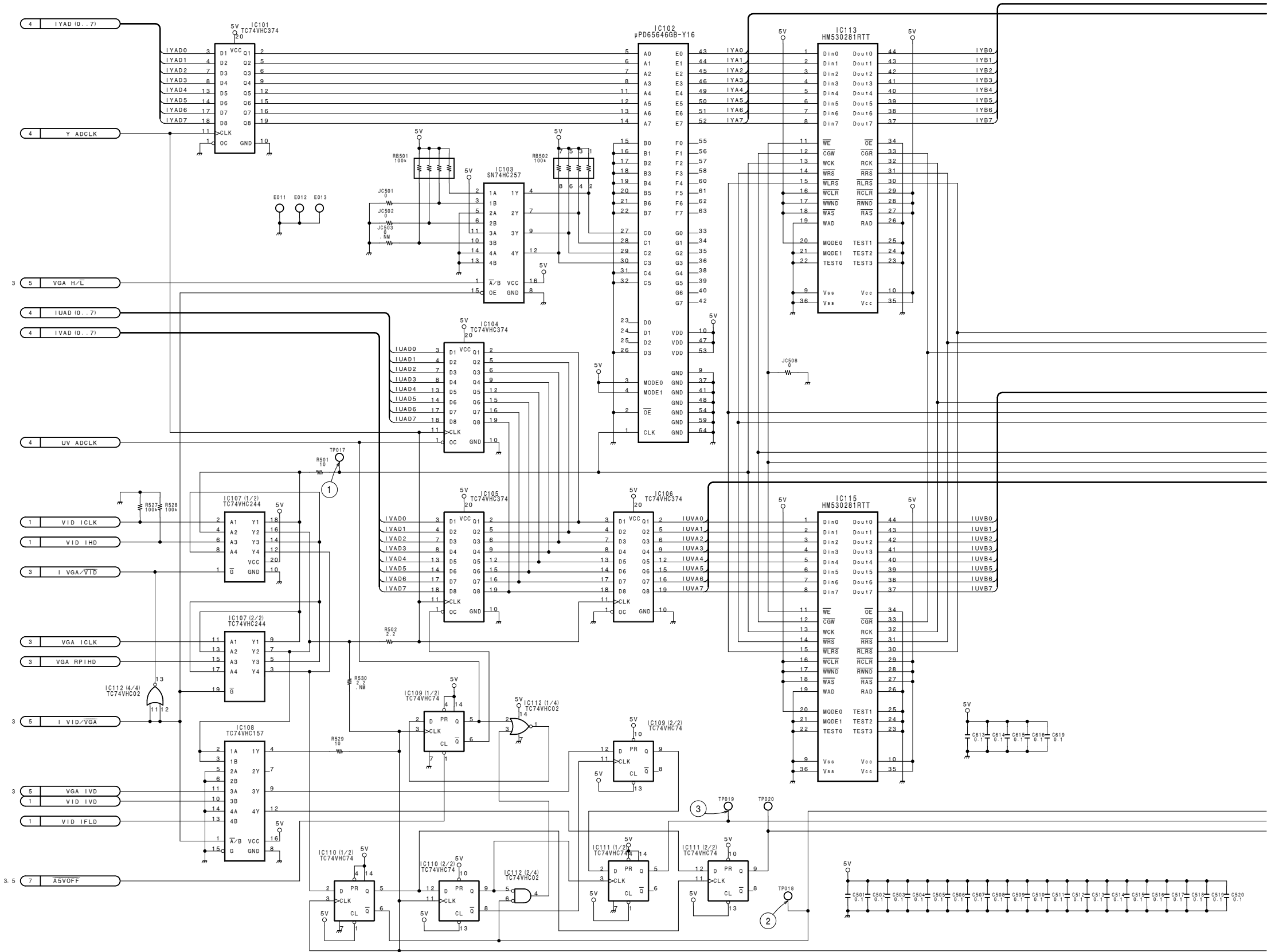
PCS-G510 (J) ; S/N 30041 and higher
PCS-G510 (UC) ; S/N 10111 and higher
PCS-G510 (CE) ; S/N 40171 and higher



DAD-33/33P BOARD (4/8)
1-671-389-12
B-NMX112-DAD33-3

134 (PCS-5100/5100P-J, E)

DAD-33/33P (5/8); DUAL MONITOR



6-152 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

6-152 (a)
(PCS-P500/P500P SERVICE MANUAL Volume 2)

A

B

C

D

E

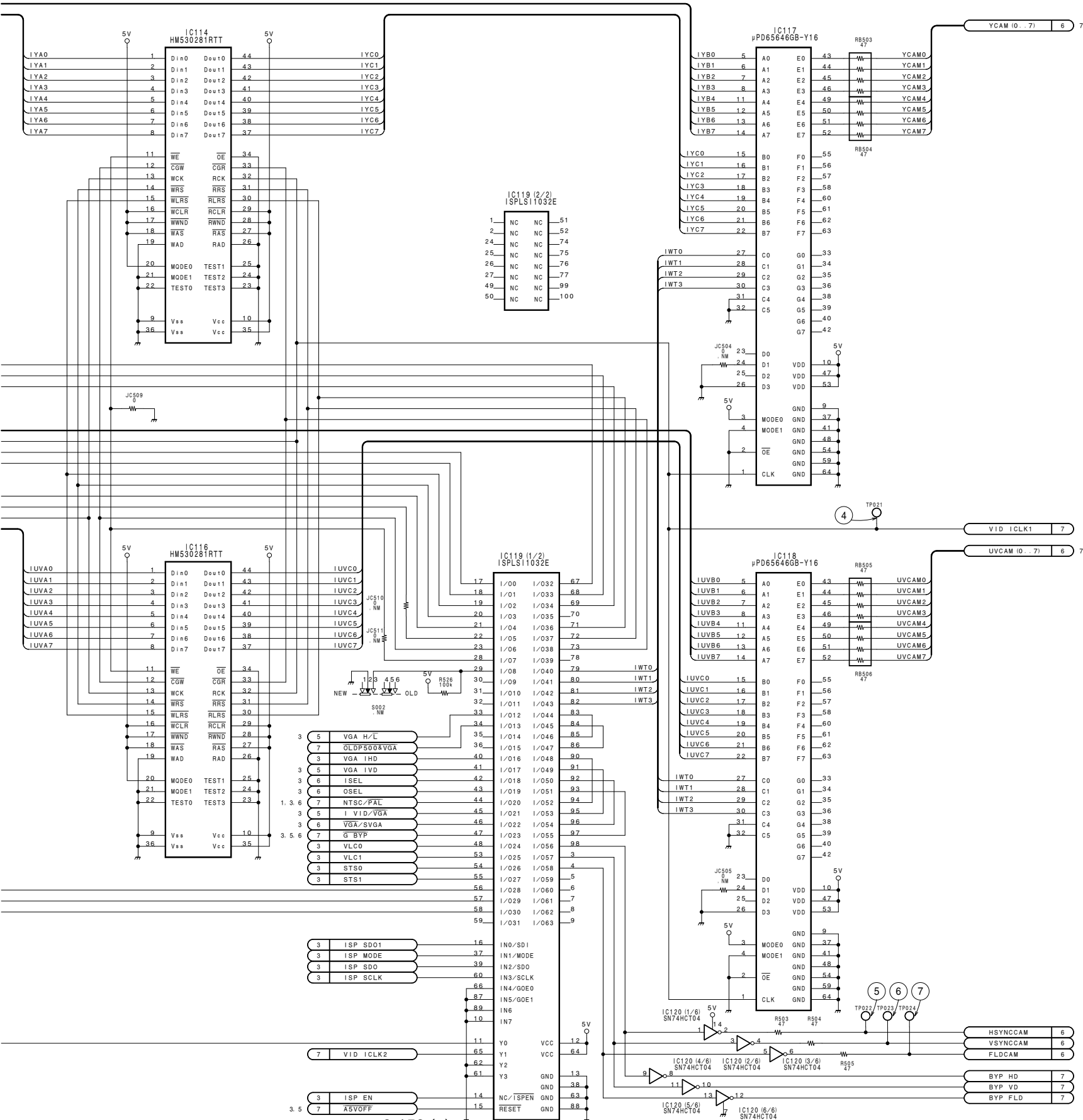
F

G

H

PCS-G510 (J) ; S/N 30041 and higher
PCS-G510 (UC) ; S/N 10111 and higher
PCS-G510 (CE) ; S/N 40171 and higher

(PCS-5100/5100P-J, E) 135



6-153 (a)

(PCS-P500/P500P SERVICE MANUAL Volume 2)

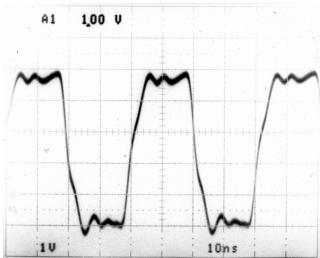
6-153 (a)

(PCS-P500/P500P SERVICE MANUAL Volume 2)

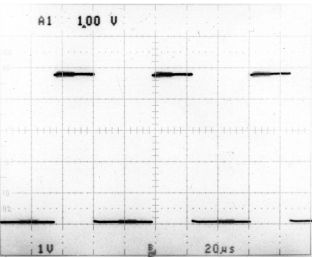
DAD-33/33P BOARD (5/8)

1-671-389-12
B-NMX112-DAD33-3

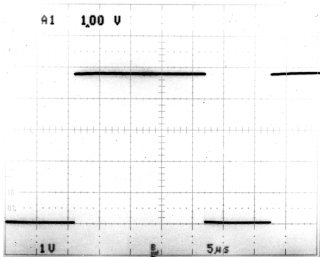
① TP17/DAD-33



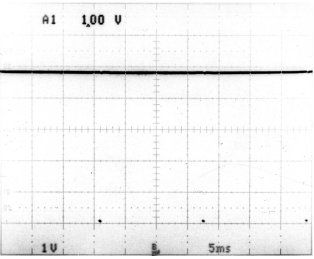
⑤ TP22/DAD-33



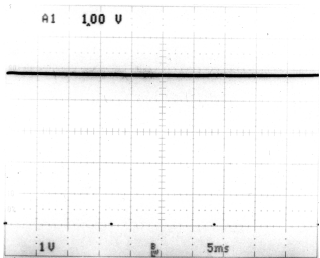
② TP18/DAD-33



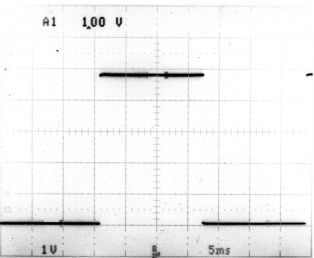
⑥ TP23/DAD-33



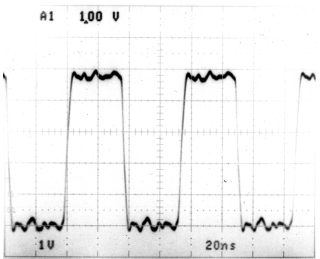
③ TP19/DAD-33



⑦ TP24/DAD-33

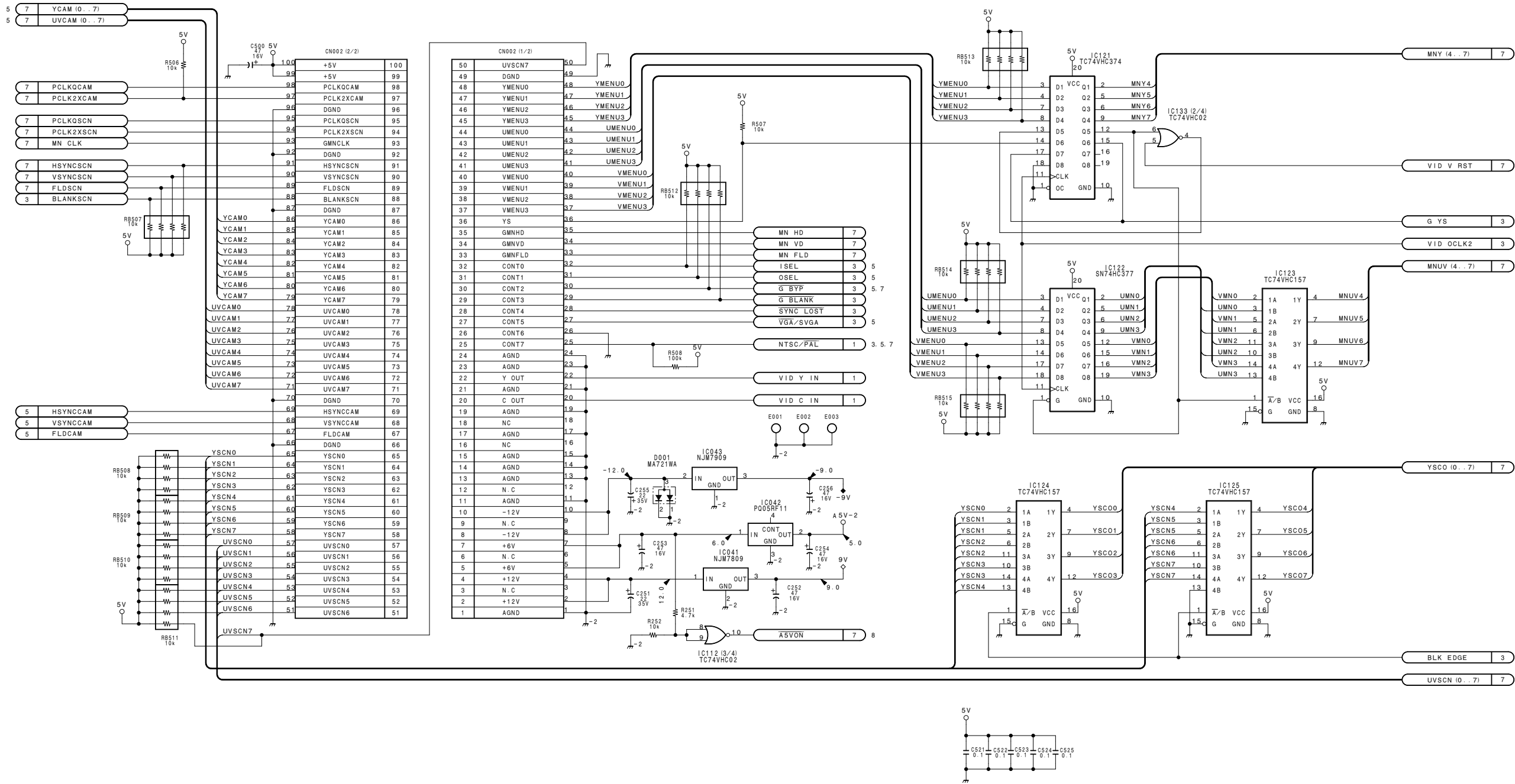


④ TP21/DAD-33

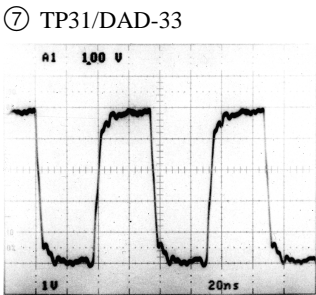
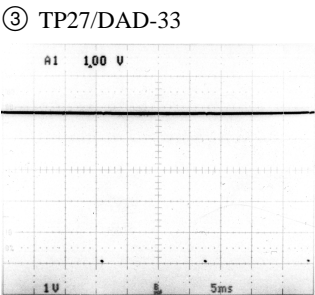
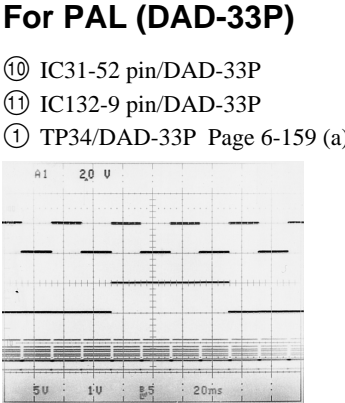
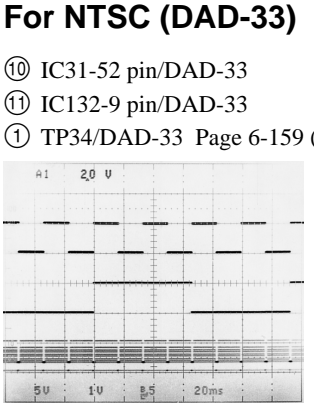
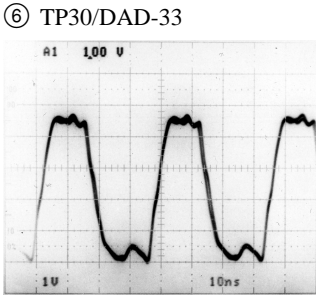
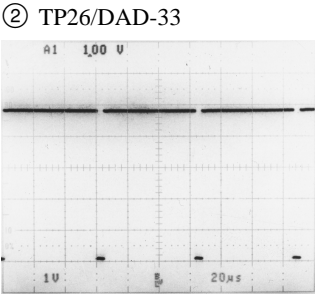
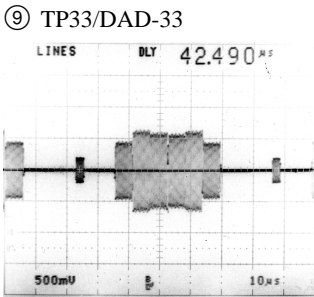
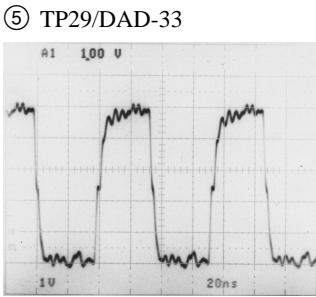
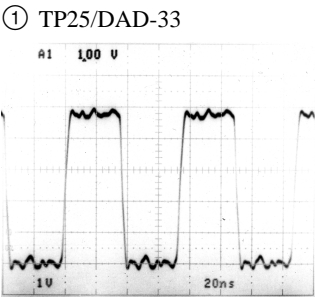


DAD-33/33P (6/8); DUAL MONITOR

PCS-G510 (J) ; S/N 30041 and higher
PCS-G510 (UC) ; S/N 10111 and higher
PCS-G510 (CE) ; S/N 40171 and higher

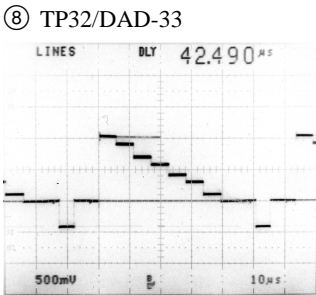
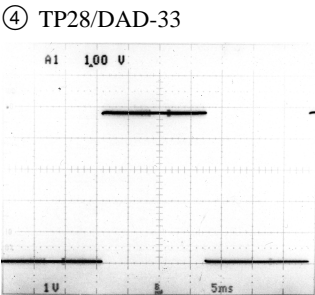


138 (PCS-5100/5100P-J, E)



NTSC: 100/7.5/75/0 COLOR BAR

PAL: 100/0/75/0 COLOR BAR

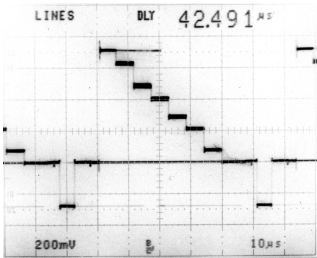


PCS-G510 (J) ;	S/N 30041 and higher
PCS-G510 (UC) ;	S/N 10111 and higher
PCS-G510 (CE) ;	S/N 40171 and higher

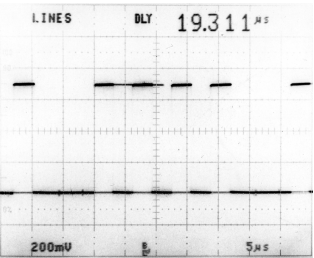


H

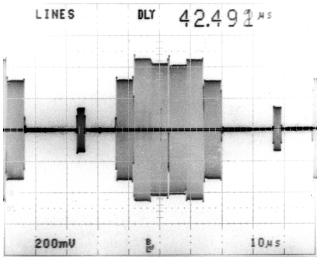
① TP34/DAD-33



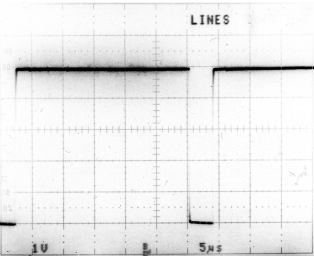
⑤ TP38/DAD-33



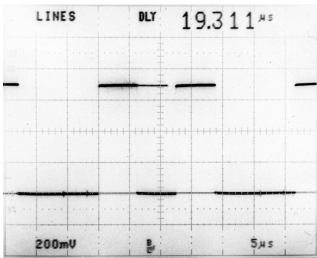
② TP35/DAD-33



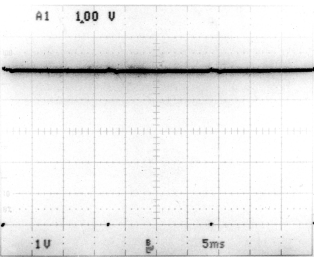
⑥ TP39/DAD-33



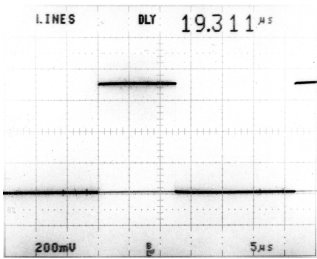
③ TP36/DAD-33



⑦ TP40/DAD-33

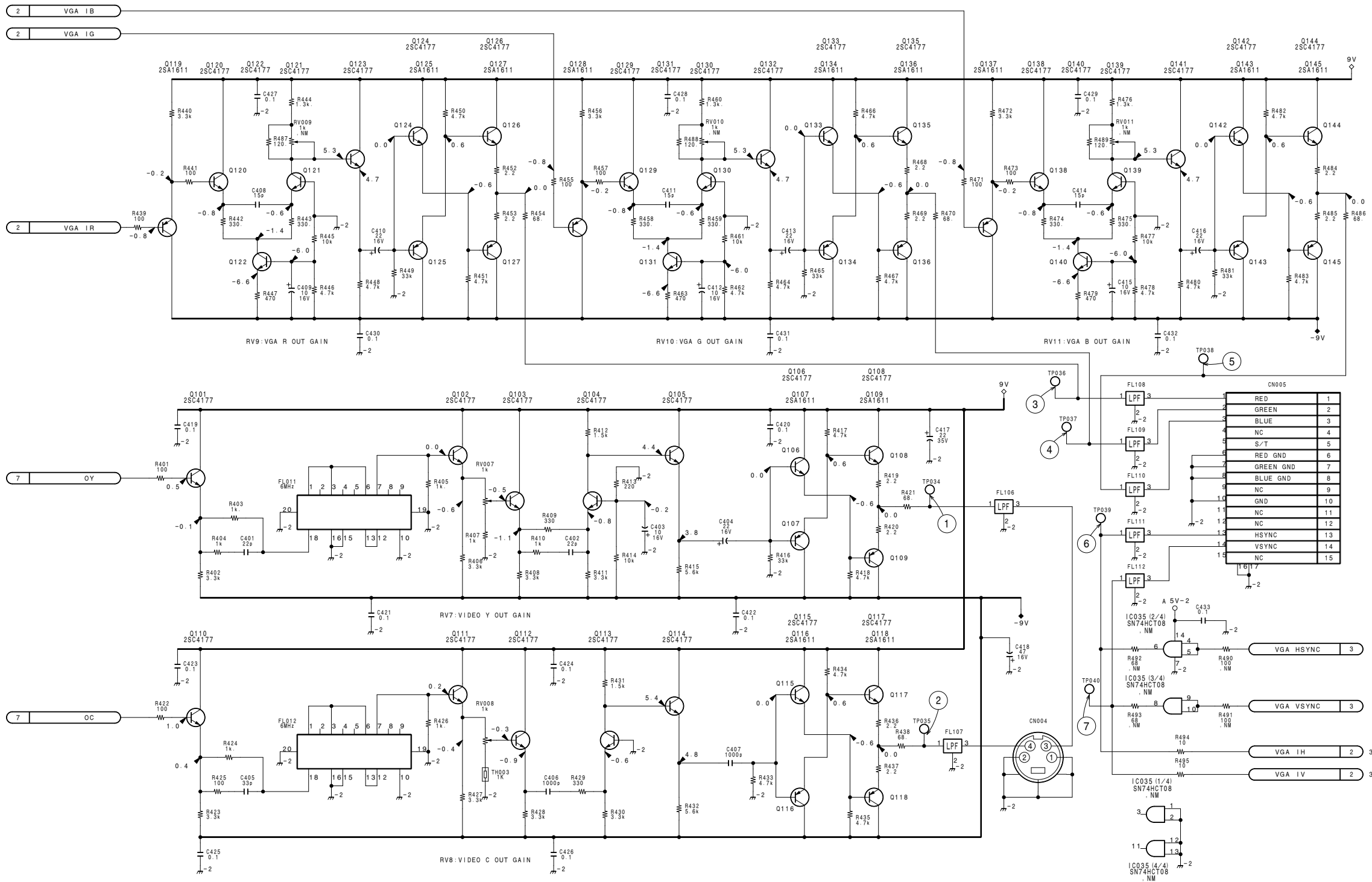


④ TP37/DAD-33



DAD-33/33P (8/8); DUAL MONITOR

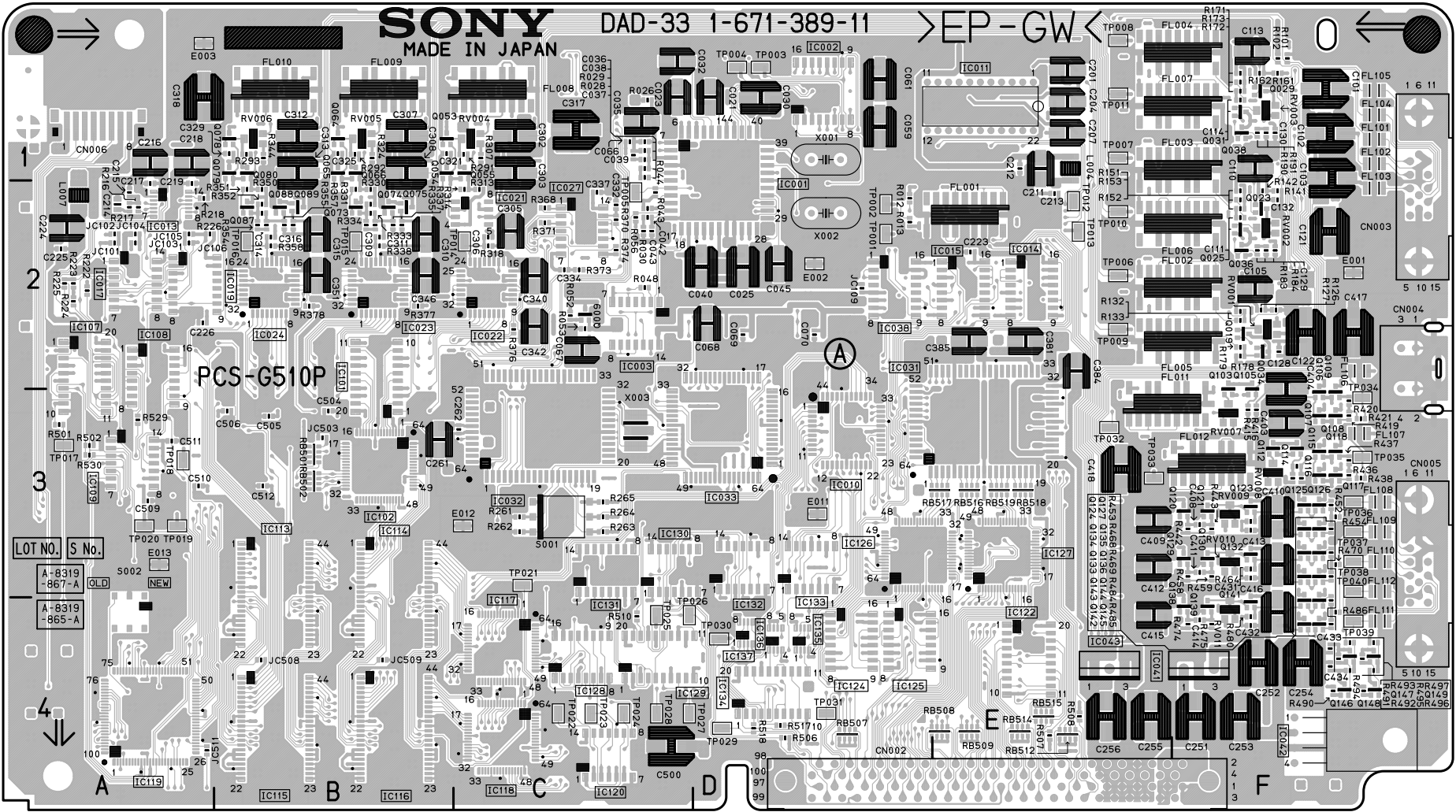
PCS-G510 (J) ; S/N 30041 and higher
PCS-G510 (UC) ; S/N 10111 and higher
PCS-G510 (CE) ; S/N 40171 and higher



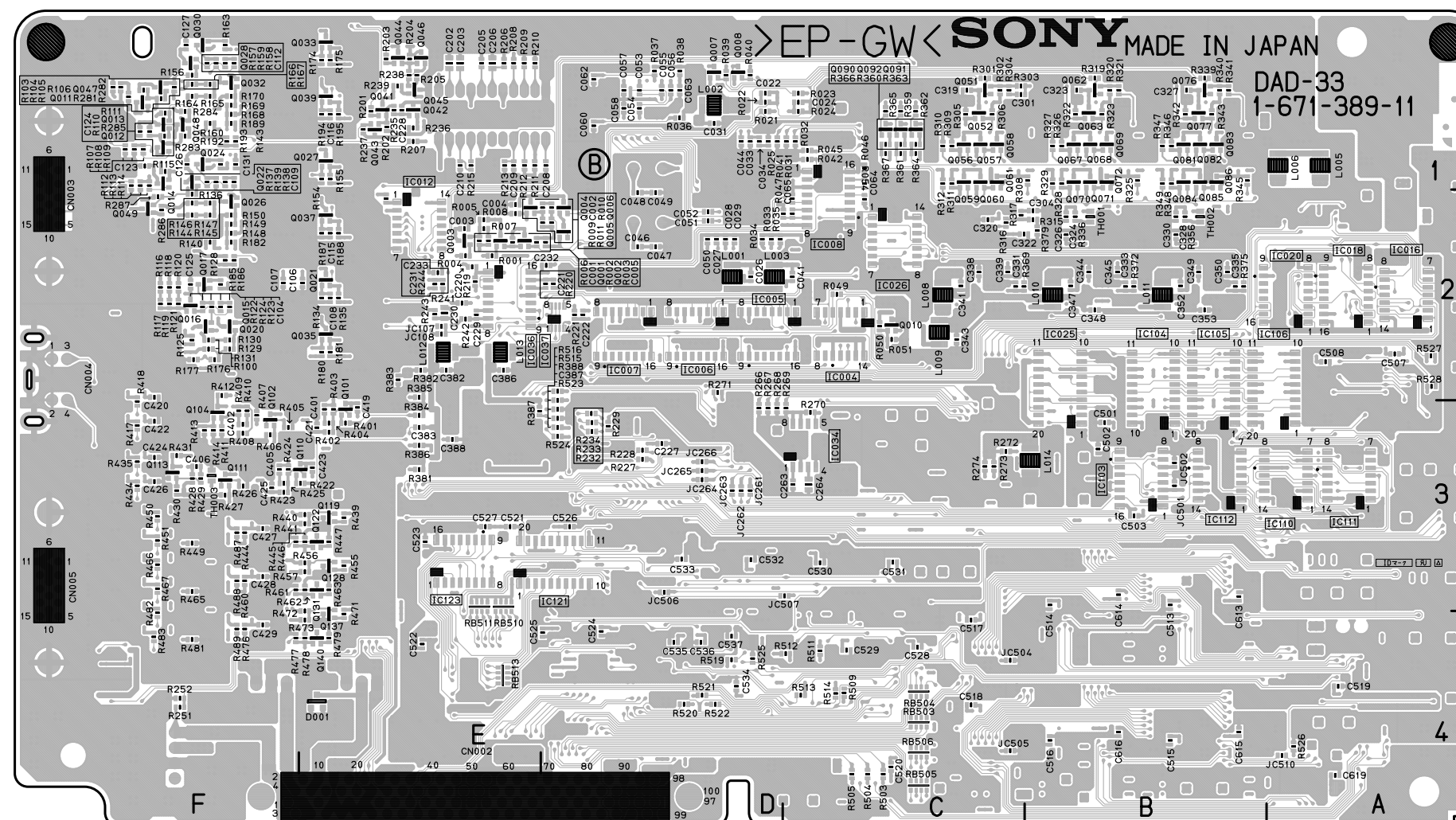
DAD-33/33P BOARD (8/8)

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B-NMX112-DAD33-3

PCS-G510 (J) : SN 30001 through 30040
PCS-G510 (UC) : SN 10001 through 10110
PCS-G510 (CE) : SN 40001 through 40170



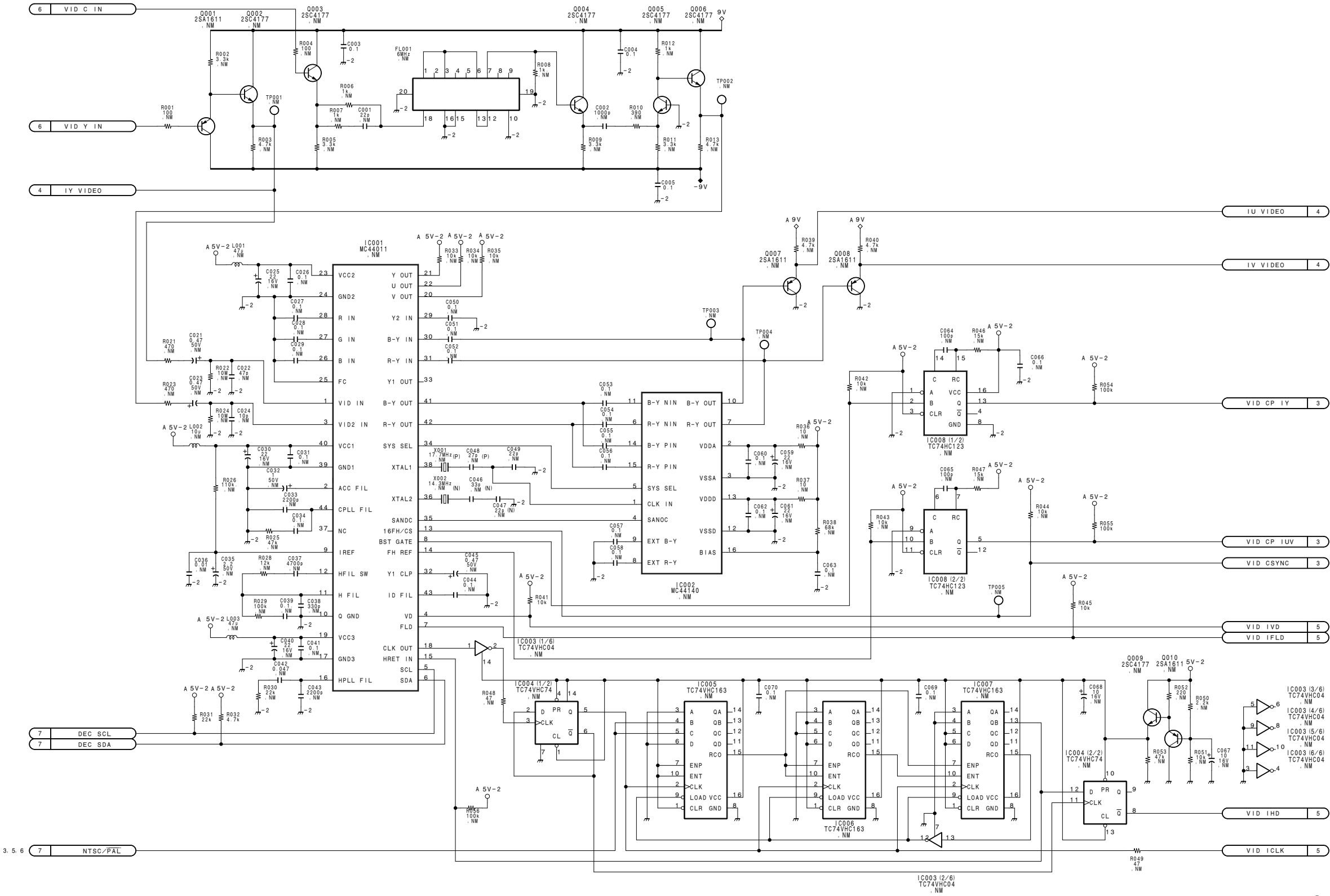
DAD-33/33P -A SIDE-
SUFFIX: -11



DAD-33/33P -B SIDE-
SUFFIX: -11

DAD-33/33P (1/8); DUAL MONITOR

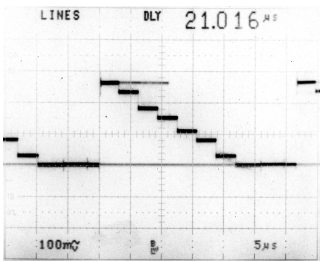
PCS-G510 (J) ; S/N 30001 through 30040
PCS-G510 (UC) ; S/N 10001 through 10110
PCS-G510 (CE) ; S/N 40001 through 40170



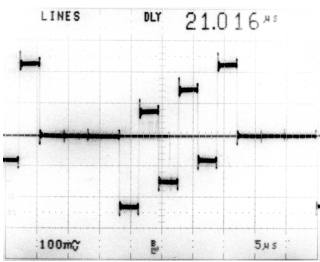
DAD-33/33P BOARD (1/8)

1-671-389-11
B-NMX112-DAD33-2

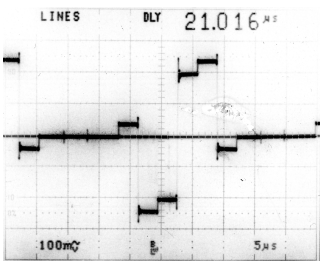
- ① TP6/DAD-33
- ④ TP9/DAD-33



- ② TP7/DAD-33
- ⑤ TP10/DAD-33

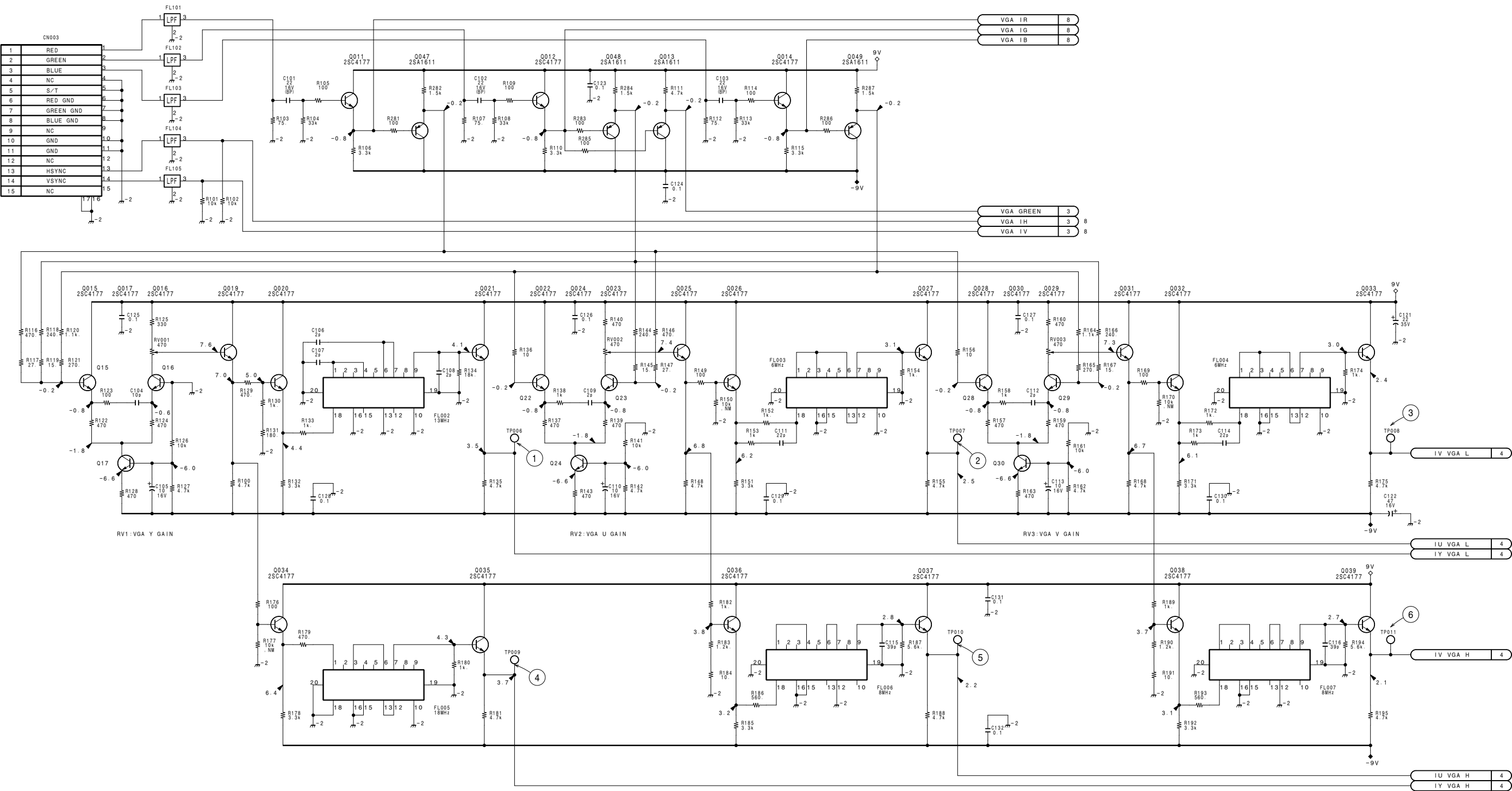


- ③ TP8/DAD-33
- ⑥ TP11/DAD-33



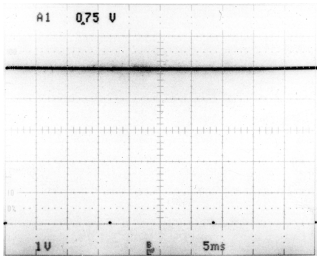
DAD-33/33P (2/8); DUAL MONITOR

PCS-G510 (J) ; S/N 30001 through 30040
PCS-G510 (UC) ; S/N 10001 through 10110
PCS-G510 (CE) ; S/N 40001 through 40170

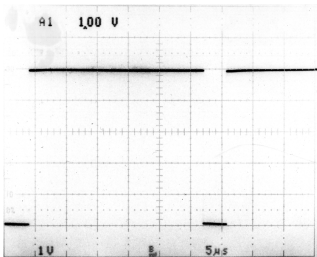


148 (PCS-5100/5100P-J, E)

① TP12/DAD-33



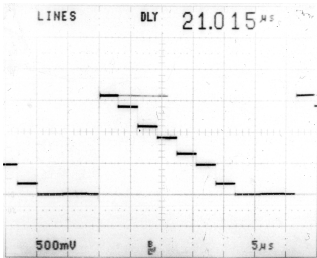
② TP13/DAD-33



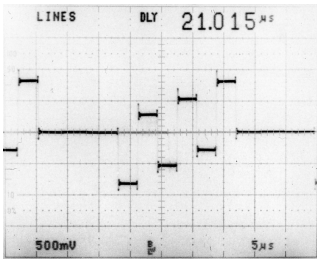


150 (PCS-5100/5100P-J, E)

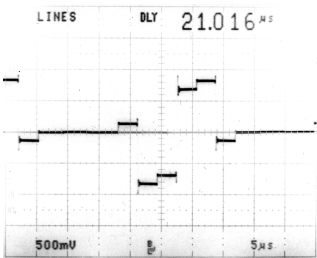
① TP14/DAD-33



② TP15/DAD-33

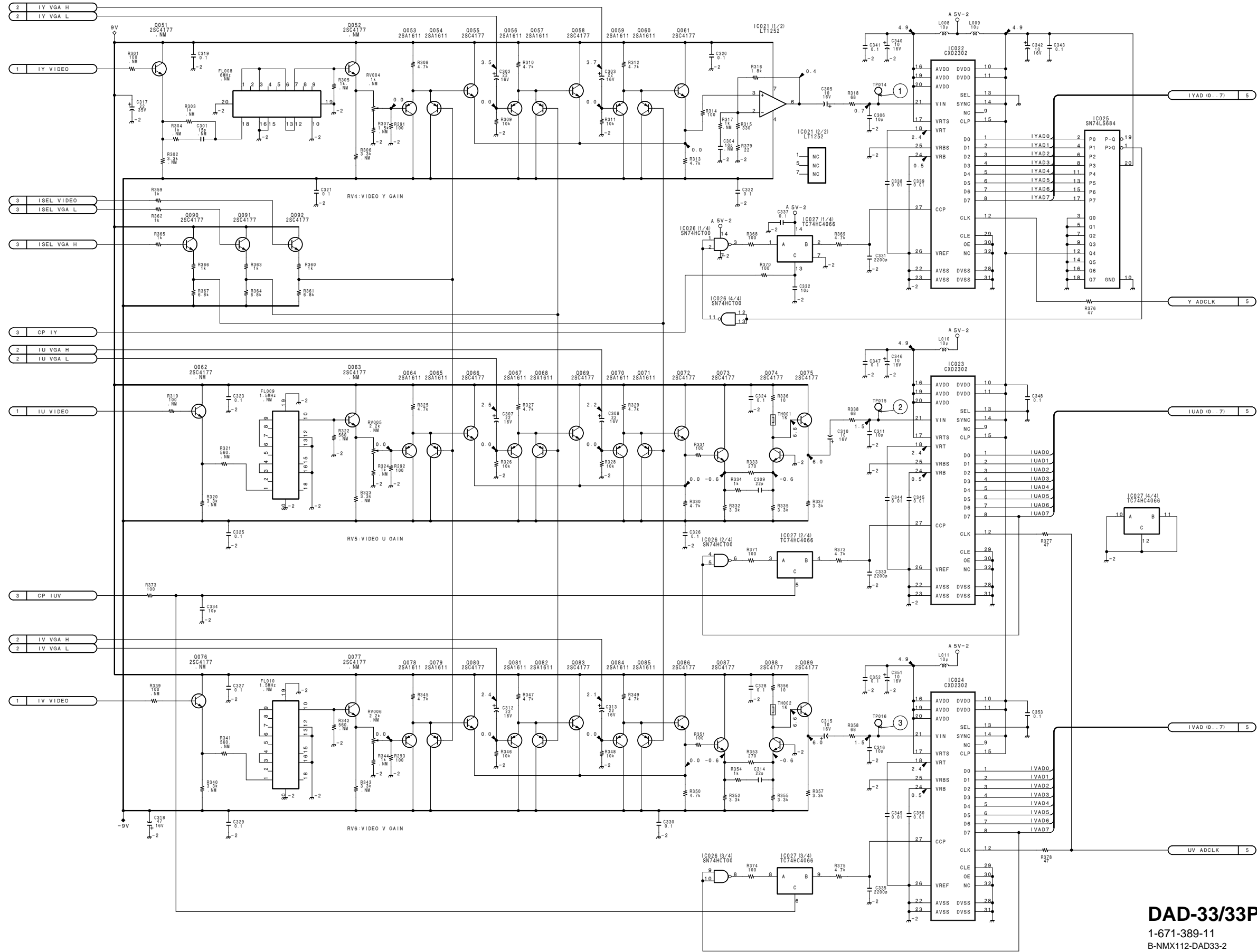


③ TP16/DAD-33

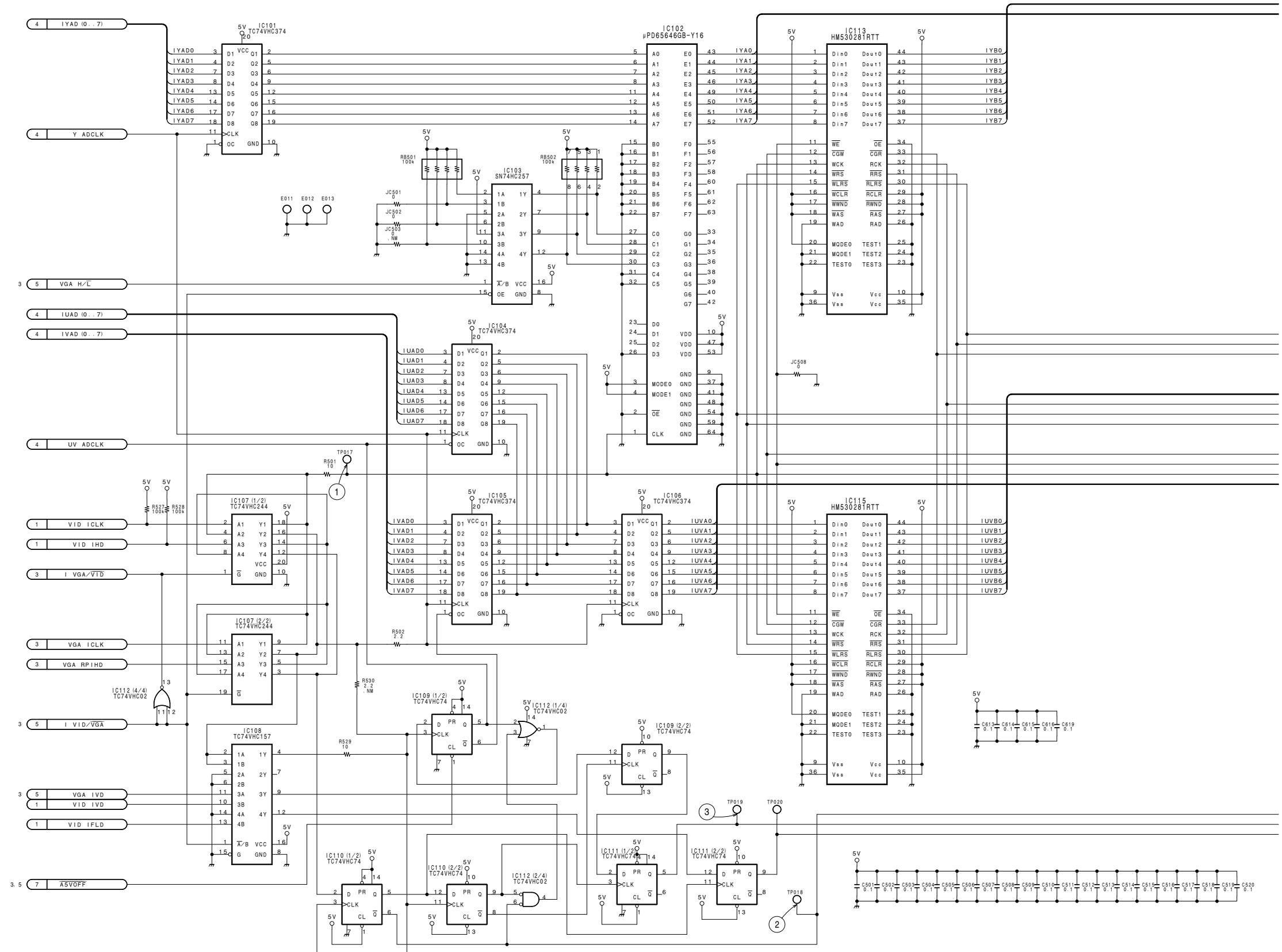


DAD-33/33P (4/8); DUAL MONITOR

PCS-G510 (J) ; S/N 30001 through 30040
PCS-G510 (UC) ; S/N 10001 through 10110
PCS-G510 (CE) ; S/N 40001 through 40170



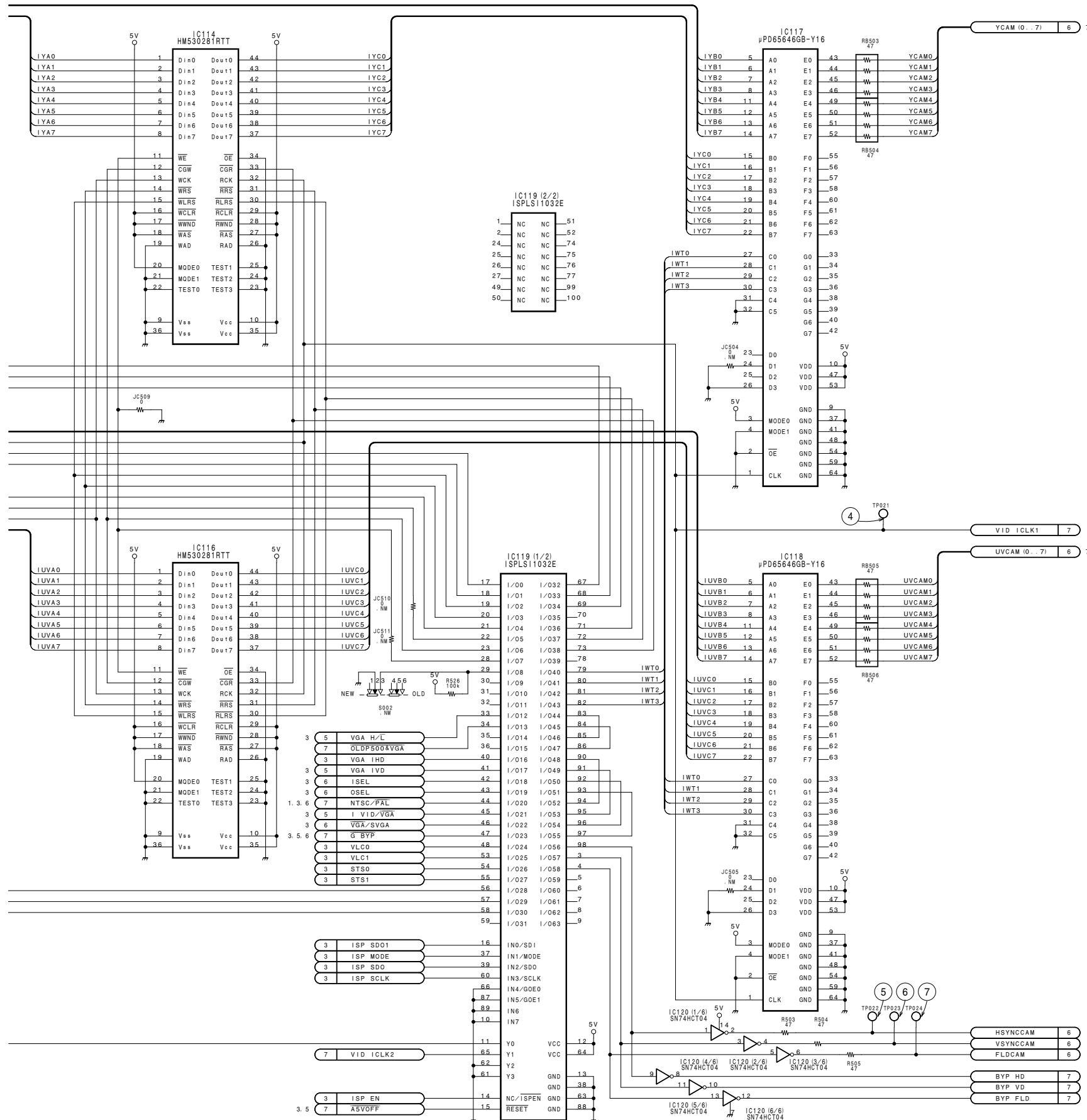
DAD-33/33P (5/8); DUAL MONITOR



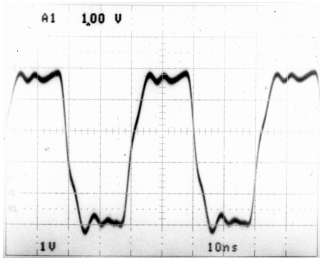
DAD-33/33P (5/8)

PCS-G510 (J) ;	S/N 30001 through 30040
PCS-G510 (UC) ;	S/N 10001 through 10110
PCS-G510 (CE) ;	S/N 40001 through 40170

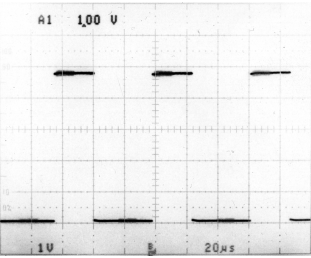
(PCS-5100/5100P-J, E) 153



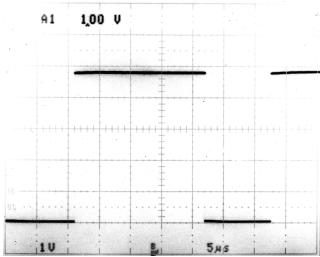
① TP17/DAD-33



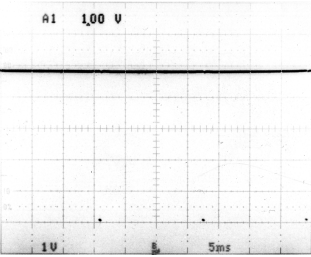
⑤ TP22/DAD-33



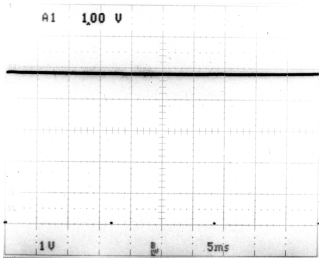
② TP18/DAD-33



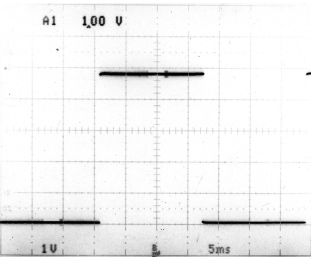
⑥ TP23/DAD-33



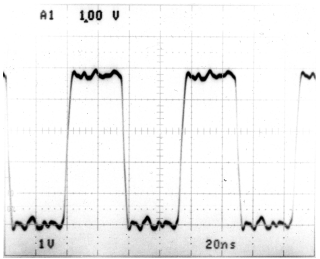
③ TP19/DAD-33



⑦ TP24/DAD-33

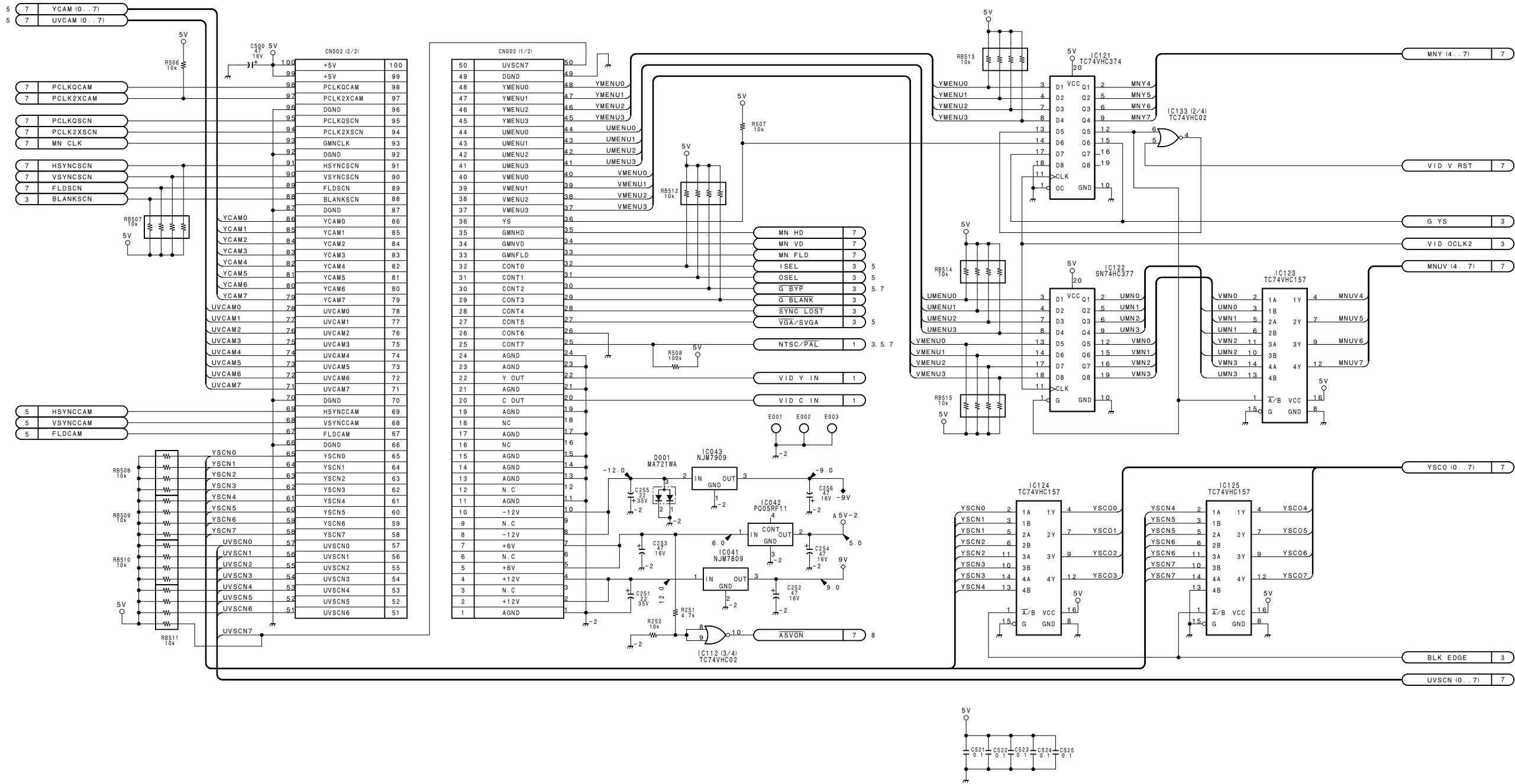


④ TP21/DAD-33



DAD-33/33P (6/8); DUAL MONITOR

PCS-G510 (J) ; S/N 30001 through 30040
PCS-G510 (UC) ; S/N 10001 through 10110
PCS-G510 (CE) ; S/N 40001 through 40170

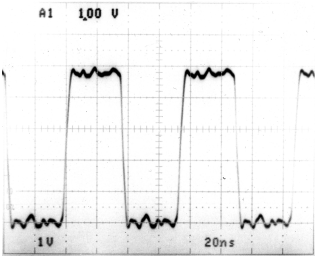


DAD-33/33P BOARD (6/8)

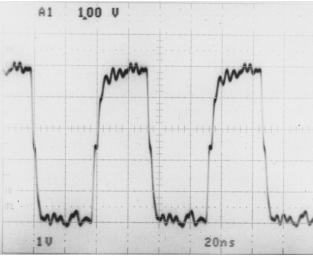
1-671-389-11
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156 (PCS-5100/5100P-J, E)

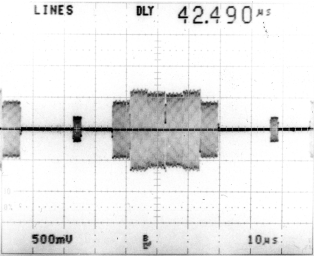
① TP25/DAD-33



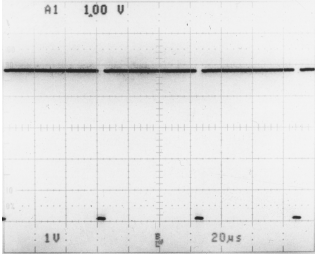
⑤ TP29/DAD-33



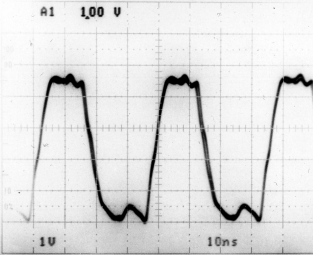
⑨ TP33/DAD-33



② TP26/DAD-33

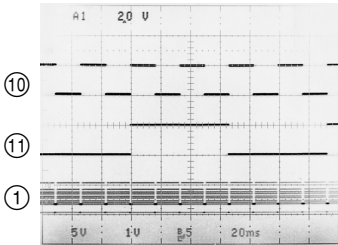


⑥ TP30/DAD-33



For NTSC (DAD-33)

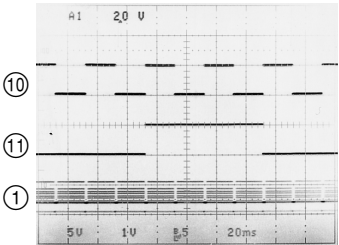
- ⑩ IC31-52 pin/DAD-33
- ⑪ IC132-9 pin/DAD-33
- ① TP34/DAD-33 Page 6-159



NTSC: 100/7.5/75/0 COLOR BAR

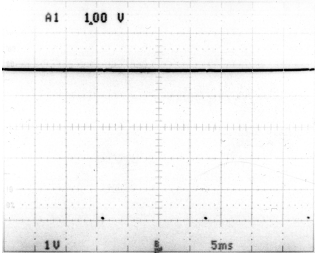
For PAL (DAD-33P)

- ⑩ IC31-52 pin/DAD-33P
- ⑪ IC132-9 pin/DAD-33P
- ① TP34/DAD-33P Page 6-159

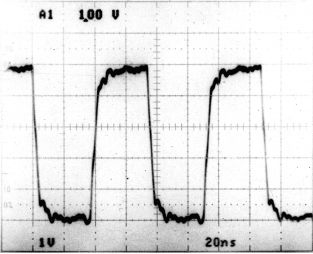


PAL: 100/0/75/0 COLOR BAR

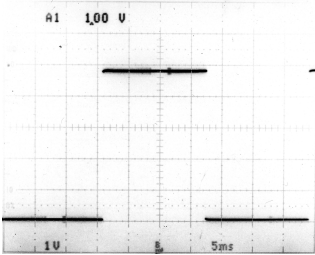
③ TP27/DAD-33



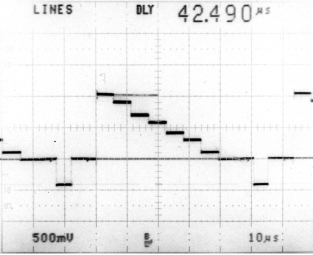
⑦ TP31/DAD-33



④ TP28/DAD-33

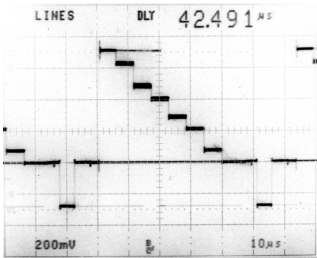


⑧ TP32/DAD-33

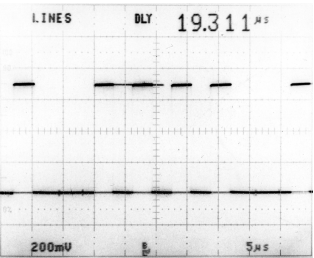




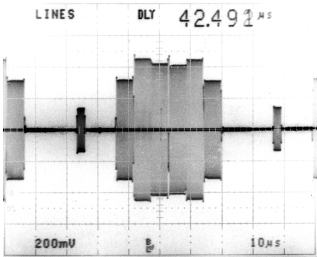
① TP34/DAD-33



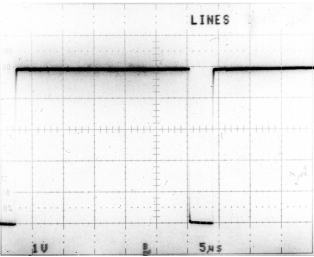
⑤ TP38/DAD-33



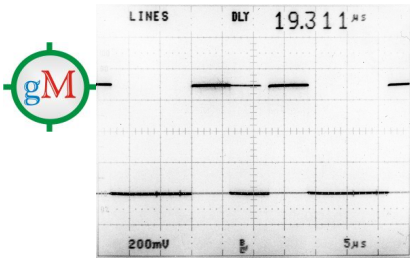
② TP35/DAD-33



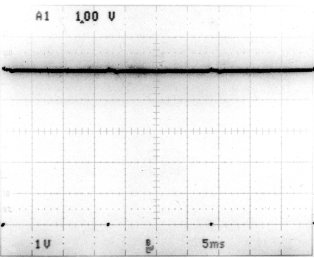
⑥ TP39/DAD-33



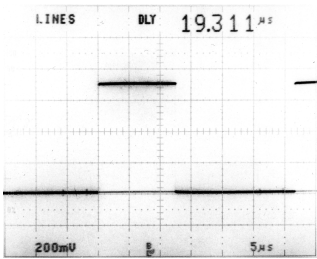
③ TP36/DAD-33



⑦ TP40/DAD-33

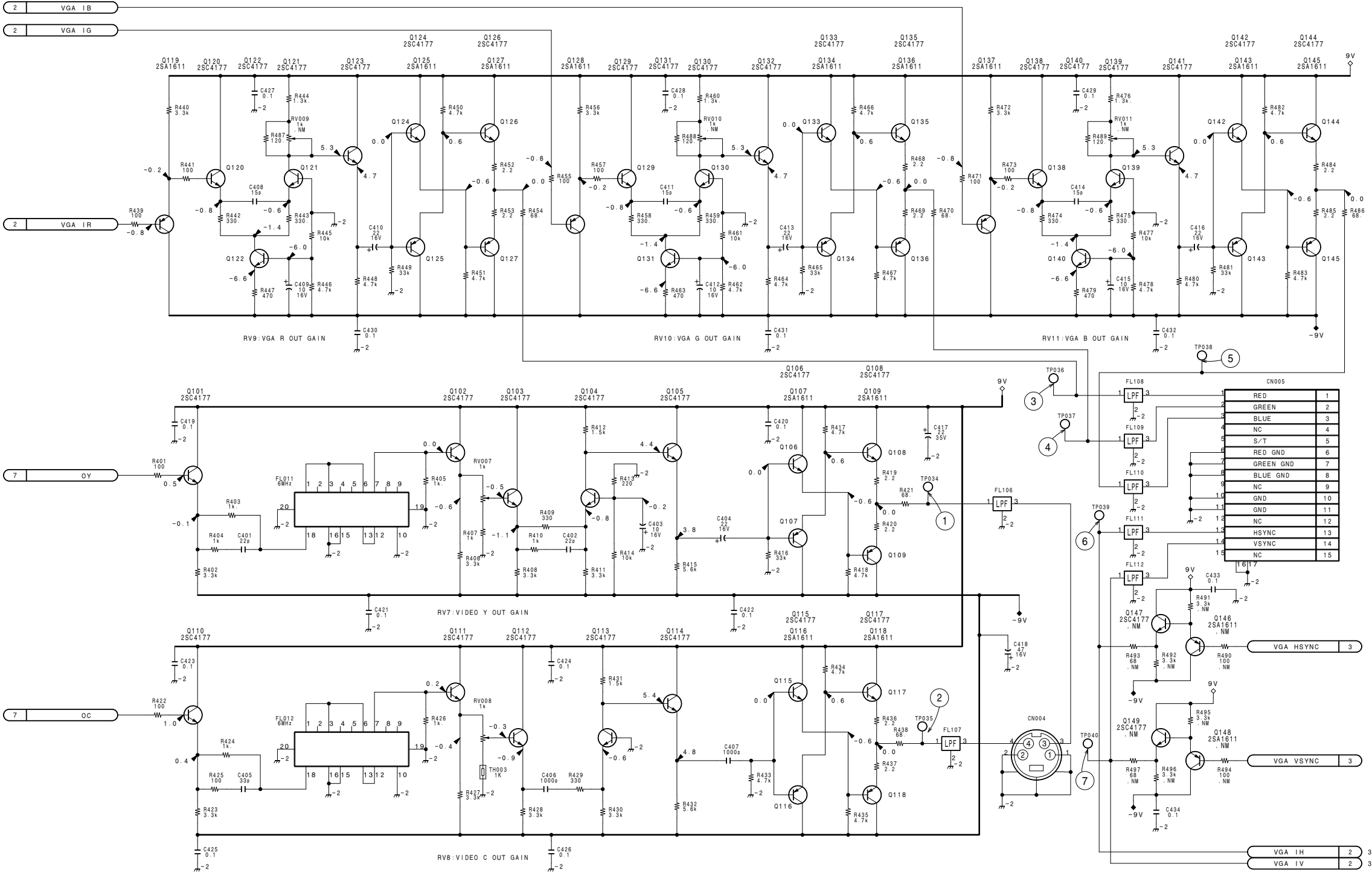


④ TP37/DAD-33



DAD-33/33P (8/8); DUAL MONITOR

PCS-G510 (J) ; S/N 30001 through 30040
PCS-G510 (UC) ; S/N 10001 through 10110
PCS-G510 (CE) ; S/N 40001 through 40170



DAD-33/33P BOARD (8/8)
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B-NMX112-DAD33-2

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